Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Response to Comments on Proposed Amendments to:

310 CMR 7.00

Air Pollution Control

REGULATORY AUTHORITY:
M.G.L. c. 111, §§142A – 142O
M.G.L. c. 21N

March 9, 2018

In accordance with MassDEP's Workplan for implementing Governor Baker's Executive Order No. 562, and to meet federal Clean Air Act requirements, on August 12, 2016, MassDEP proposed amendments to 310 CMR 7.00 *Air Pollution Control*, including:

- 310 CMR 7.00 to add and amend definitions;
- 310 CMR 7.01 to add a computation of time provision;
- 310 CMR 7.02 to clarify Plan Approval applicability, exemptions and procedures; increase public comment opportunities; and establish criteria for greenhouse gases;
- 310 CMR 7.12 to add a small source exemption from emissions reporting and revise the lead reporting threshold;
- 310 CMR 7.18 to update Reasonably Available Control Technology (RACT) for volatile organic compounds used in certain coating, printing, and cleaning operations; and to create flexibility for solvent cleaning of certain high precision components;
- 310 CMR 7.19 to update RACT for oxides of nitrogen for certain boilers, turbines, and engines at major sources;
- 310 CMR 7.26 to update stationary engine and combustion turbine requirements;
- 310 CMR 7.32 (rescind) and 310 CMR 7.34 (new section) to replace the current summertime ozone season nitrogen oxide regional trading program with a state-only nitrogen oxide budget program;
- 310 CMR 7.51 to establish timelines and procedures for requesting adjudicatory appeals of air decisions; and
- 310 CMR 7.00: Appendix C to remove greenhouse gas applicability and clarify "insignificant activities."

MassDEP held public hearings and solicited oral and written testimony on the proposed amendments in accordance with Massachusetts General Law Chapter 30A. On August 12, 2016, MassDEP published a notice in the Boston Globe and Worcester Telegram and Gazette announcing the schedule of public hearings and public comment period on the proposed amendments. Public hearings were held on September 13, 2016 in Boston, September 14, 2016 in Boston, and September 15, 2016 in Worcester. The comment period closed on September 26, 2016.

This document summarizes and responds to comments that were received during the public comment period. Those who provided comments are listed below:

1. David Darling, American Coatings Association (ACA)
2. Robert A. Rio, Associated Industries of Massachusetts (AIM)
3. Jeffrey Richards, Alnylam Pharmaceuticals (Alnylam)
4. Lynn Sheridan, Capaccio Environmental Engineering (Capaccio)
5. DSG Solutions (DSG)
6. Margo Rice Jay, Environmental Health & Engineering (EHE)
7. Jeffry F. Ludwig, Environmental Health & Engineering (EHE)
8. David B. Conroy, U.S. Environmental Protection Agency, Region I (EPA)
9. Dale T. Raczynski, Epsilon Associates (Epsilon)

10. Daniel Fefer, Epsilon Associates with co-signors: (Epsilon)
    - Paul DeViller, Lahey Medical Center Peabody
    - Paul Cantrell, Lahey Health
    - Edward Pitts, Tufts Medical Center
    - Edward M. Browne, Cambridge Health Alliance
    - Stephen Chiavelli, Massachusetts Eye & Ear
    - George Player, Brigham and Women's Hospital
    - Robby Robertson, Lahey Health
    - Dan McGrath, Shire
    - Nicholas T. DiIeso, Mount Auburn Hospital
    - Kevin J. Keating, Shriners Hospitals for Children - Boston
    - Bruce McCoy, Hallmark Health System
    - Edmund Lydon, Beverly Hospital, The American Society for Healthcare Engineering of the American Hospital Association and New England Healthcare Engineers' Society
11. Eric A. Pearson, ESS Group (ESS)
12. Ruthanne F Calabrese, Eversource Energy (Eversource)
13. Graphic Arts Coalition: Tad Parker, Printing Industries of New England; Doreen Monteleone, Flexographic Technical Association; Marcia Y. Kinter, Specialty Graphic Imaging Association; Gary A Jones, Printing Industries of America (GAC)
14. Tad Parker, Printing Industries of New England (PINE)
15. J. Andrew Irwin, Irwin Engineers (Irwin)
16. Thomas A. Mackie, Mackie Shea O'Brien (Mackie)
17. Tamara C. Small, NAIOP Massachusetts (NAIOP)
18. Shawn Konary, NRG Canal and NRG Energy (NRG)
19. Alan Kao, Ramboll Environ (Ramboll)
20. T. Bradley Duffin, Raytheon (Raytheon)
21. Joshua Berman, Sierra Club (SC)
22. Kenneth Goulart, Taunton Municipal Lighting Plant (TMLP)

PLAN APPROVALS – 310 CMR 7.02

1. Comment: (EPA) MassDEP has proposed revisions to 310 CMR 7 .02 "Plan Approval and Emission Limitations." Some of the text MassDEP is proposing to change has never been approved into the SIP. Other regulatory text covers similar sections or definitions that have been approved into the SIP but the SIP approved language is different from the text that is currently adopted by the Commonwealth. MassDEP should submit the regulations in their entirety, and not just the revisions, for EPA approval into the SIP. In doing so, please include the required information for a SIP revision as specified in 40 CFR 51, subpart F from any earlier adoption or other revisions made to the subsection(s) of 310 CMR 7.02 for which the MassDEP seeks approval into the SIP.

Response: MassDEP agrees and plans to submit the entire regulatory text of 310 CMR 7.02 and the required information for a SIP revision to EPA for approval into the Massachusetts SIP.

2. Comment: (EPA) MassDEP is proposing to update section 310 CMR 7.02(2)(b)32 to reference the newly proposed 310 CMR 7.34. The title of this provision should also be revised to reference MassNOx instead of MassCAIR as currently stated.

Response: MassDEP agrees and has changed the reference to the NOx Ozone Season Program in the final regulations.

GHGs

3. Comment: (EPA) Section 310 CMR 7.02(1)(d)l: Last month, the EPA Administrator signed a proposed amendment to EPA' s prevention of significant deterioration (PSD) permit regulations that will require states to adopt a significant emission rate (SER) for greenhouse gases of 75,000 tons per year (tpy) measured on a carbon dioxide equivalent basis (CO_2e). The SER applies to any new or modified source that is required to obtain a PSD permit. Section 310 CMR 7.02(1)(d)l. sets the GHG threshold for a new source at 100,000 tpy CO_2e which is inconsistent with EPA's proposed rule revisions.

Response: MassDEP agrees and has included a single 75,000 tpy GHG threshold for plan approval in the final regulations to maintain consistency with the proposed federal PSD permitting requirements. While the Massachusetts Environmental Policy Act (MEPA) regulations use GHG thresholds of 75,000 tpy for modifications at existing facilities and100,000 tpy for new facilities, MEPA review serves a different purpose than MassDEP permitting, and facilities triggering MEPA review at the higher threshold will still require a plan approval from MassDEP due to the single 75,000 tpy GHG plan approval threshold in the final regulations.

4. Comment: (Epsilon) 7.02(1)(d) Please clarify which level of Plan Approval is required in the appropriate sections for LPA, NMCPA, etc. for the proposed levels of GHG of 100,000 tpy and 75,000 tpy. Please resist any comments that suggest lowering these thresholds as this is already potentially adding a redundant review of the efficiency of a project that will be reviewed

under the GHG policy of MEPA, which DEP already comments on through the MEPA review process

Response: MassDEP agrees and has clarified that if a plan approval is required due to potential GHG emissions, a CPA is required. As noted in the Response to Comment 3, MassDEP has eliminated the 100,000 tpy threshold to be consistent with proposed federal PSD requirements for GHGs.

5. Comment: (Capaccio) In 310 CMR 7.02(1)(d) Determining Plan Approval Applicability, thresholds were added for the air contaminant greenhouse gases (GHGs), but it does not state which type of air plan approval would be required; limited plan or non-major comprehensive plan. Since the proposed changes to 310 CMR 7.02(1)(d) refer facilities to thresholds in 310 CMR 7.02(4) and 310 CMR 7.02(5), it would be beneficial to have the GHG thresholds listed in the corresponding areas (i.e., 310 CMR 7.02(4) or (5))

Response: MassDEP agrees and has clarified that where a plan approval is required due to potential GHG emissions, a comprehensive plan approval is required. MassDEP has added a cross-reference in 7.02(5) to the GHG threshold in 7.02(1)(d)1.

6. Comment: (Capaccio) Will the GWP be updated each year (as available) to recalculate CO_2e?

Response: The definition of Carbon Dioxide Equivalent in the final regulations reference the global warming potential (GWP) set forth in 40 CFR part 98 subpart A Table A-1 – Global Warming Potentials as in effect on January 1, 2015. MassDEP will periodically update the regulation as EPA updates 40 CFR part 98 subpart A Table A-1.

7. Comment: (Eversource) MassDEP is proposing to establish Plan Approval applicability for facilities that emit greenhouse gases (GHGs) at or greater than 100,000 tons carbon dioxide equivalent (CO_2e) for new facilities and 75,000 tons CO_2e for modifications at existing facilities. Local Gas Distribution Companies ("LDCs") are required to report Greenhouse emissions from their distribution systems. They conduct thousands of construction activities annually, that may change the LDCs potential to emit. The language as proposed may result in an LDC being required to submit a 7.02 application for every maintenance activity. Eversource suggests that LDCs be exempted from this requirement for maintenance activities, main extensions, gas service installations and other system improvements.

Response: MassDEP does not consider a natural gas distribution system to be a facility subject to permitting under 310 CMR 7.02. Under 310 CMR 7.00, MassDEP defines a "facility" as "any installation or establishment and associated equipment, located on the same, adjacent or contiguous property, capable of emissions;" and for the purpose of 310 CMR 7.15, it means "any dumping ground, or any installation, structure, building establishment or ship, and associated equipment." By contrast, under 310 CMR 7.71, *Reporting of Greenhouse Gas Emissions*, MassDEP defines "facility" as "a building, structure or installation located on contiguous or adjacent properties of an entity, *or a natural gas facility*." (italics added) MassDEP's GHG reporting program serves a different purpose than MassDEP's permitting program, and therefore

the reporting regulations (i.e., 310 CMR 7.71) define a facility in a way that is more inclusive of large GHG emitters, including LDCs. However, MassDEP does not consider a distribution system operated by a LDC to be a facility for 310 CMR 7.02 permit purposes, and construction/repair/maintenance of the distribution system would not trigger 7.02 permitting.

Public Comment

8. Comment: (EPA) EPA appreciates MassDEP adding public participation to the CPA process in 7.02. Public process is a key element in meeting EPA' s requirements for a minor NSR program contained at 40 CFR 51.160-164. However, since EPA last revised section 310 CMR 7.02 in the SIP in 1989, the Commonwealth has made significant changes to this section of its regulations, including the entire subsection (310 CMR 7.02(5)) for CPAs. As discussed above, MassDEP should submit the regulation in its entirety, and not just the revisions, for EPA approval into the SIP. Please include the required information for a SIP revision as specified in 40 CFR 51, subpart F from any earlier adoption or other revisions made to section 310 CMR 7.02(5).

Response: MassDEP agrees and plans to submit the entire regulatory text of 310 CMR 7.02 to EPA for approval into the Massachusetts SIP, along with the required supporting documentation as to legal authority and administrative process for all adoptions and revisions associated with the proposed content.

9. Comment: (NAIOP) Proposed 310 CMR 7.02(3)(h) would require that the Department provide an opportunity for public comment on all comprehensive plan applications (CPAs) and a subset of limited plan applications (LPAs) "in accordance with the requirements in 40 CFR Part 51.161." The proposal is intended in part to assure that the Department's air permitting procedures satisfy certain EPA requirements. NAIOP is not opposed to adding public notice requirements for CPAs and that subset of LPAs, and the notice requirements in the federal regulation are suitable and sufficient. It would be preferable, however, to spell out the public notice requirements directly in 310 CMR 7.00 rather than including them just by reference to an EPA regulation. Comparable public notice provisions for other MassDEP permits are contained within MassDEP's own regulations, which is where the regulated community expects to find them.

Response: MassDEP agrees and has added specific requirements for public comment opportunities consistent with 40 CFR Part 51.161 found in a new section 310 CMR 7.02(3)(i) in the final regulations.

10. Comment: (ESS) We do not believe that the proposed 30 day comment period for all Comprehensive Plan Approvals will reduce unnecessary regulatory burden upon businesses as stated in executive order number 562, issued by Charlie Baker, which prompted the Amendments to 310 CMR 7.00. This proposed amendment will extend the review period of Comprehensive Plan Approvals by potentially 60 days due to the 30 day appeal period and may result in multiple months' worth of lost revenue opportunities, due to project delays for many companies. Timeliness of regulatory reviews is critical to business expansion and growth initiatives. These growth initiatives could favorably provide employment opportunities and the

proposed amendment would be detrimental to overall business climate within the State of Massachusetts and is contrary to the objective of EO 562.

Response: The Clean Air Act requires states to provide a 30-day comment period for minor new source review permits, and therefore MassDEP has kept the 30-day public comment period for CPAs. MassDEP believes the CPA is the right permit level for defining its minor NSR program. Major CPAs already require a public comment period, so the result of the final regulations is to add non-major CPAs to the category of permits that require public comment.

Permitting Exemptions / Certifications

11. Comment: (EPA) MassDEP should limit the exemptions for plan approvals to only changes that will not be subject to new source review, including the Commonwealth's SIP approved minor new source review program. As currently proposed, this section allows a source to be exempted from obtaining a Comprehensive Plan Approval (CPA) if it is making one of the listed changes at its facility. If MassDEP intends to submit its CPA regulations as its minor new source review (NSR) program, the Commonwealth should remove the exemption to section 310 CMR 7.02(5) in section 310 CMR 7.02(2)(b).

Response: MassDEP has removed reference to the 7.02(5) CPA provisions in the final regulations, thereby limiting the exemptions in 7.02(2)(b) to only projects that would otherwise trigger an LPA. Most of the activities listed in 7.02(2)(b) would be exempt from plan approval due to being processes with less than one ton per year potential to emit, and the specific exemptions were added to the regulations to help facilities more easily identify exempt activities and not have to prepare potential to emit calculations. Therefore, MassDEP believes limiting the exemptions to only activities that might otherwise require an LPA is consistent with the original intent of the exemptions, which was to exempt small projects but not to exempt projects that would otherwise require a CPA.

12. Comment: (EPA) Under section 310 CMR 7.03(1), a source subject to a CPA could comply with the provisions of 310 CMR 7.03 in lieu of obtaining a CPA. Section 310 CMR 7.03 is not practicably enforceable as currently promulgated and cannot be used as part of the Commonwealth's minor NSR program. To address this, MassDEP should exclude any source subject to a CPA from using 310 CMR 7.03.

Also, EPA understands that a source needing a CPA could, as an alternative, certify compliance with 310 CMR 7.26 in lieu of obtaining a source specific permit. MassDEP would either have to revise 310 CMR 7.26 as necessary to meet the requirements for a general minor NSR permit rule or exempt sources subject to a CPA from certifying they will comply with 310 CMR 7.26 instead of obtaining a CPA.

Response: MassDEP has not changed the scope of 310 CMR 7.03 or 7.26 to address EPA's comment since the draft regulations did not contemplate such changes. However, MassDEP will work with EPA on developing further regulation amendments as appropriate to address EPA's comments.

13. Comment: (EPA) MassDEP should require all emission increases over the CPA applicability thresholds to obtain a CPA by exempting such emission increases from 310 CMR 7.03 and 7.26. Otherwise, the Commonwealth will need to address the emission increases allowed by 310 CMR 7.03 and 7.26 in the required CAA sections 110(l) and 110(a)(2)(C) demonstrations for supporting that the CPA program is sufficient in meeting MassDEP's minor NSR obligations.

Response: See Response to Comment 12. In addition to any further regulation amendments that may be needed, MassDEP will work with EPA to develop the appropriate demonstration regarding its minor NSR obligations.

PSD

14. Comment: (EPA) Section 310 CMR 7.02(5)(a)(9): Please note in addition to requiring a CPA, a facility making a change that would violate a condition of a PSD permit, a nonattainment NSR permit, or a case-by-case most achievable control technology decision under 40 CFR part 63, may require revisions to the existing permits, regardless as to whether the Commonwealth issues a CPA for that change.

Response: MassDEP agrees and has noted in the final regulations that a revision to the existing permit may be required regardless of whether a CPA is required.

OPERATING PERMITS – 310 CMR 7.00 Appendix C

15. Comment: (Capaccio) Does the 100 tons per year of any other regulated air pollutant in 310 CMR 7.00 Appendix C(1)(a) include GHGs?

Response: The 100 tons per year applicability in 310 CMR 7.00 Appendix C(1)(a) does not include GHGs; MassDEP has clarified that GHGs are not included in the 100 tons in the final regulations.

16. Comment: (DSG) Within the proposed updates, Page 20 shows the proposed modifications to Appendix C of 310 CMR 7.00. The second paragraph is labeled 310 CMR 7.00 Appendix C(5)(**i**), however, it appears the proposed update should have been labeled 310 CMR 7.00 Appendix C(5)(**a**). In addition, the third paragraph is labeled 310 CMR 7.00(C)(5)(**j**), but appears it should have been labeled 310 CMR 7.00(C)(5)(**i**). Please confirm this is an accurate understanding and that no new paragraphs have been added to Appendix C.

Response: MassDEP agrees and confirms that the revisions are to 310 CMR 7.00 Appendix C(5)(a) and C(5)(i).

17. Comment: (DSG) Please confirm that emissions from sources on the list of insignificant activities do not need to be considered for any other regulatory provision other than Appendix C(2). Specifically, please confirm that the sources will continue to be exempt from the requirements of Appendix C(5), as stated in Appendix(c)(5)(3).

Response: MassDEP agrees and confirms that, according to Appendix C(2), emissions from insignificant sources are exempt from the requirements of other provisions of Appendix C, including Appendix C(5).

18. Comment: (DSG) While the existing language in 310 CMR 7.00 Appendix C(5)(i) specifies that emissions from sources on the list of [insignificant] activities are exempt from the requirements of Appendix C, facilities may have interpreted the language to mean there was no requirement to quantify emissions from these sources and may have therefore excluded such emissions from all recordkeeping requirements. For this reason we are seeking clarification on whether emissions from sources on the insignificant activities list should be included within other recordkeeping requirements, for example, New Source Review analysis conducted in accordance with 310 CMR 7.00 Appendix A assuming such emission are below thresholds required to obtain a Plan Approval. For example, it does not appear to be the intent of Appendix A that facilities include a value for the increase in net emissions associated with the installation of a HVAC system or the purchase of an additional mobile vehicle when determining contemporaneous net emission increases associated with the installation of a combustion unit. Please also confirm that emissions from exempt activities, as described in 310 CMR 7.00 Appendix C(5)(h), should be included in such analyses, considering such emissions are expected to be quantified for other regulatory purposes (e.g. Source Registration reporting).

Response: The Appendix C regulations do not explicitly require that a facility keep records of emissions from insignificant activities (i.e., failure to keep such records is not a violation of the

regulations). However, a facility is responsible for accounting for emissions from insignificant activities when determining Appendix C applicability. It is up to each facility to determine how it should account for and track emissions from insignificant activities. Emissions from insignificant activities must be taken into account in Appendix A review where applicable. For example, emissions from a HVAC system should be taken into account, whereas emissions from the purchase of an additional mobile vehicle would not be taken into account because a vehicle does not fall within the definition of a "facility." Emissions from exempt activities, as described in 310 CMR 7.00 Appendix C(5)(h), should be included in Appendix A analyses and are subject to Source Registration reporting.

19. Comment: (DSG) We would propose that MassDEP add clarifying language to the regulations regarding how a facility should proceed if a new exempt activity (or insignificant activity if MassDEP does not agree with our understanding in item 5 above) triggers the New Source Review threshold due to contemporaneous emission increases. For example, a facility may install a new emission source permitted according to 310 CMR 7.02 that alone does not increase the facility's net emissions above the NSR thresholds. However, within the next 5 years, the facility may install several small water heaters that are exempt from obtaining a plan approval according to 310 CMR 7.02(2)(b) or emergency generators installed in accordance with 310 CMR 7.26(42), together the net contemporaneous emissions are above the NSR thresholds. If the installation of an emergency generator triggers the NSR thresholds, is a facility expected to obtain a NSR permit for that generator?

Response: The circumstances described apply at a facility that is classified as an existing major stationary source pursuant to 310 CMR 7.00 Appendix A, "Emission Offsets and Nonattainment Review." The terminology "exempt" and "insignificant" and associated concepts are not used in 310 CMR 7.00 Appendix A. The owner or operator of a major stationary source must determine the net emissions increase associated with any increase in actual emissions from a particular physical change or change in method of operation at the facility, regardless of exemptions from other regulatory requirements. In particular, a change at a major stationary source that meets an exemption criterion under 310 CMR 7.02(2)(b) is nonetheless subject to net emissions increase determination pursuant to the exclusions from exemptions under 310 CMR 7.02(2)(c)1. and 2. Furthermore, the installation of an engine or turbine that would cause a significant net emissions increase is not eligible for certification under 310 CMR 7.26, pursuant to 310 CMR 7.26(40)(a). If the installation of an emergency generator would trigger the NSR thresholds, the owner or operator of the facility should apply for a NSR permit or may investigate options for reducing the magnitude of the net emissions increase.

SOURCE REGISTRATION – 310 CMR 7.12

20. Comment: (EPA) Massachusetts should consider revising the content of its source registration such that process-level emissions data for Hazardous Air Pollutants (HAPs) is required. Massachusetts currently only collects HAP data at the facility level. Although reporting HAP emissions data is not required by EPA's air emissions reporting rule requirements found within 40 CFR part 51, Subpart A, adding this level of detail would enable Massachusetts to submit the HAP data it does collect to EPA' s National Emissions Inventory (NEI) database. This data would then be readily available for use in national analyses such as periodic national air toxic assessments.

Response: MassDEP currently collects HAP data at the facility level. MassDEP is considering collecting additional HAP data, including at the process level, which would not require a regulation change.

21. Comment: (Capaccio) In 310 CMR 7.12(2) the submittal deadline for three year filers has changed, but does not state when it will come into effect.

Response: The new deadlines for Source Registration will take effect on the date the regulations are promulgated, which means that the new deadlines will apply to the 2018 reporting cycle (i.e., April 1, 2018 for triennial filers; May 1st and June 1st for annual filers).

22. Comment: (Epsilon) For 7.12 Source Registration, we suggest that DEP clarify potential emissions estimates by adding under (3) Source Registration Contents (a)(2) Detailed emission estimates… "Any limitations on hours of operation applicable to a source either by Approval condition or regulation may be used to calculate potential emissions, and in the case of emergency generators without limiting conditions, a default value of 500 hours per year may be used consistent with EPA guidance."

Response: MassDEP does not believe the regulations need to be amended to address this issue. MassDEP instead will update the Source Registration forms and instructions to allow a facility with enforceable emissions, usage, or operating restrictions to report its maximum allowed emissions as its potential emissions on the Source Registration form. The instructions also would allow the use of a default value of 500 hours per year for an emergency engine.

23. Comment: (EH&E) While we understand the need to compress the timeline in order for MassDEP to meet EPA reporting deadlines based on this data, moving triennial Source Registration filing to March 1 poses a particular challenge to consulting companies such as ours who manage a number of compliance deadlines for a large number of clients, or to facilities who do their own filings with limited compliance resources. As there are already annual EPA deadlines for Tier 2 filing under the Emergency Preparedness and Community Right to Know Act (EPCRA) on that same day which apply to a large number of facilities, as well as biennial reporting for hazardous waste on alternate years, compliance personnel are already very busy in January and February. Imposing yet another March 1 deadline would make it administratively difficult to complete all these reports accurately and on time, especially as much of the data (such as natural gas usage) may not be available for the end of the year until well into February.

The winter and spring are very busy for our compliance staff. We have regular compliance deadlines through the winter and spring months, but in recent years, these deadlines have been staggered in such a way that we have been able to handle many of them sequentially. Our preference would be to keep the reporting schedule as it stands. If that is not possible, we would propose moving all the triennial filers to June 1. Our next proposal would be to move the triennial filers to May 1, or to move the GHG reporting deadline to May 1 and the triennial filers to April 1.

Moving the triennial filing up any further would still put a big strain on our resources. It has been our experience that triennial filings can take more time than the annual filings because there are more likely to have been changes since it has been three years since the last filing, and some of these have not happened all that recently so the details can take some time to track down. Compressing the reporting timeline could reduce time available to ensure quality, and increase pressure for facilities to gather and/or process year-end data on a very limited timeframe, potentially increasing both internal and external costs.

Response: MassDEP has moved the deadline for triennial filers to April 1 (instead of March 1 as originally proposed), moved the operating permit facility filing deadline to May 1, and the remainder of the annual filers to June 1 in the final regulations. This provides the ability for both filers and MassDEP to spread the workload over a wider timeframe. The deadline for GHG reporting is not contained in the Source Registration regulations and remains April 15.

VOC RACT – 310 CMR 7.18

24. Comment: (EPA) The new VOC RACT (Volatile Organic Compound Reasonably Available Control Technology) requirements being proposed in 310 CMR 7.18 require facilities to comply with the emission limits by "2 years after the promulgation date." The proposed rule also allows facilities to apply for an extension "until no later than 3 years after the promulgation date," if the facility's emission control plan meets certain Toxics Use Reduction Plan criteria. Massachusetts should consider accelerating the compliance date by requiring compliance be achieved within 1 year, unless the source requests, and is granted, additional time to meet the requisite emission limit.

Response: MassDEP believes a 2 year period prior to compliance is warranted due to the many sources (small and large) covered by these CTGs. This period will allow adequate time for MassDEP to conduct outreach to these sources and time for the sources to plan for compliance.

25. Comment: (EPA) As noted in the Background Document, MassDEP is proposing to amend 310 CMR 7.00 to update its RACT requirements for VOCs consistent with EPA's Control Techniques Guidelines (CTGs). EPA notes, however, that in its RACT certification, MassDEP will also need to address all major non-CTG sources, and other VOC sources for which MassDEP previously submitted single source VOC RACT SIP revisions, to ensure that they are still sufficient for meeting RACT. In particular, any sources for which it was previously determined that no feasible emission reductions existed, and therefore RACT involved no emission controls or no reformulation, should be reviewed to determine whether that conclusion is still valid.

Response: MassDEP acknowledges EPA's comment and has reviewed major non-CTG sources and other sources with VOC RACT SIPs and will include documentation of this review in the RACT certification MassDEP will submit to EPA.

26. Comment: (PINE/SGIA) Overall, PINE and SGIA support the proposed changes to the RACT rules as several of them clarify applicability which provides for more regulatory certainty, especially the paper film foil surface coating, adhesives, and industrial solvent cleaning rules. Historically, there has been a lot of confusion regarding the applicability of these rules to printing operations and these proposed revisions will clarify this confusion. One change to the industrial solvent cleaning rule that is being requested would be to exempt digital printing devices from the requirements. The emissions from cleaning from these devices are minimal and the cleaning materials are not able to meet the limits in the rule. In addition, this rule was never intended to cover these devices.

Response: MassDEP appreciates the comments supporting the amendments. Regarding digital printing, page 4 of the Industrial Cleaning Solvent CTG states that "this CTG is intended to cover all industrial cleaning operations," which would include digital printers. Thus, MassDEP's final regulation includes Work Practices for Cleaning Operations for digital printers. However, MassDEP agrees that digital printing cleaning activities should not be subject to the numerical standards in the regulations. MassDEP has amended the final regulation, at 310 CMR 7.18(31)(b)1.c.v., so that it exempts digital printing cleaning activities from numeric emissions

limits (i.e., for VOC Content Limitation, Vapor Pressure Limitation and add-on Air Pollution Capture and Control Equipment efficiency), since EPA has approved this approach in other states. A definition of Digital Printing has therefore been added to the final regulation.

27. Comment: (PINE/SGIA) As we had indicated in our statement and comments on the proposed changes to add the Very Small Printer Category to the Environmental Results Program or ERP, we would respectfully request that the DEP undertake a rulemaking to include printing operations that have incorporated digital printing devices or those operations that are exclusively using digital printing devices. We understand that the scope of this rulemaking is limited to changing major source RACT requirements and that a separate rulemaking is required to incorporate digital printing equipment into ERP.

Over the past several months, we have been working with MassDEP regarding approaches that can be used to extend the ERP program to digital printing operations. The request that we are making is in line with those ongoing discussions.

PINE and SGIA have long supported the development and implementation of the ERP program for printing operations. It provides a cost effective solution to environmental compliance and most importantly, environmental protection. Considering the current set of requirements under ERP and the demographics of the printing industry, incorporating digital operations into ERP will allow for additional regulatory streamlining.

We do, however, make the following recommendation. In the definition section, it is our recommendation that a definition for digital printing be added. Specifically, the following language should be added:

Digital Printing: A print-on-demand method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing and solid ink printing.

Including this definition into this rulemaking ensures that the future designations for the "Very Small Printer" category applies to digital operations and that once performance standards are formally established, it will be clear that digital printing operations are included in ERP. We look forward to continuing our work with the Department on the development of specific performance standards for digital devices, which is the fastest growing print technology.

Response: MassDEP will evaluate whether digital printing operations should be added to the ERP printing regulations and will consider future regulation amendments if warranted. MassDEP has added a definition of "Digital Printing" similar to the suggested definition. See Response to Comment 26.

28. Comment: (Capaccio) In 310 CMR 7.18 the recordkeeping timeframe is being increased from 3 to 5 years. Does this mean current applicable facilities need to have five years of records when the rules are promulgated?

Response: As of the effective date of the regulation, any new records and any existing records that an applicable facility still has must be kept for 5 years from the date the records were generated. Records that were kept under the previous regulations that were older than 3 years and were disposed of prior to the effective date of the new regulations would not be subject to the 5 years recordkeeping requirement.

29. Comment: (ACA) VOC Definition – ACA supports the proposed amendments to the VOLATILE ORGANIC COMPOUND definitions, specifically the added exempt compounds.

Response: MassDEP appreciates this comment.

30. Comment: (ACA) Surface Coating CTG Comments – Powder Coatings – ACA requests that MA exempt powder coatings from the metal parts/plastic parts VOC limits as other States have done and as described in the EPA CTG on page 30: "Consistent with the State rules which are the basis for the recommended VOC limits, we are recommending that the recommended VOC limits and application methods not apply to certain types of coatings and coating operations. For all coating operations, we are recommending that the recommended VOC limits and application methods not apply to aerosol coating products or powder coatings."

Response: MassDEP agrees and has exempted powder coatings and hand-held aerosol cans from the miscellaneous metal parts and products and the plastic parts VOC limits and application methods (see 310 CMR 7.18(11)(b)2.g. and (21)(b)5.).

31. Comment: (ACA) Use of Formulation Data – ACA requests that MA change the rule language from "If acceptable to the Department and EPA, manufacturer's formulation data may be used to demonstrate compliance" to "manufacturer's formulation data may be used to demonstrate compliance" since this is consistent with the language on page 30 of the CTG: "….In addition, we recommend that manufacturer's formulation data be accepted as an alternative to EPA Method 24."

Response: MassDEP notes that the next sentence in the CTG after the one quoted states "[i]f there is a disagreement between manufacturer's formulation data and the results of a subsequent test, we recommend that States use the test method results unless the facility can make a demonstration to the States' satisfaction that the manufacturer's formulation data are correct." Furthermore, EPA has indicated to MassDEP that when formulation and test data conflict, the EPA test method results prevail unless a legitimate technical justification exists for using formulation data. Deleting "If acceptable to the Department and EPA" would imply that no testing is ever required, and is not appropriate. On the other hand, in instances where EPA and MassDEP agree that the manufacturer's formulation data is acceptable, no test would be required. As such, MassDEP does not believe that this change is warranted and has not made the change.

32. Comment: (ACA) Industrial Cleaning Solvent CTG – Applicability Threshold – Massachusetts has included both a 15 lb/day and 3 ton per year threshold for the CTG amendments. Given that the 15 lb/day can impact manufacturing operations - ACA suggests

deleting the 15 lb/day threshold and just including the 3 tons per year threshold, which is consistent with other State adoptions (which have been EPA SIP approved).

Response: Deleting the 15 lb/day applicability threshold would result in a less flexible applicability threshold, as it would eliminate the option to base applicability on either 15 pounds of VOC emissions per day or 3 tons of VOC emissions per rolling 12 month period. Also, deleting the 15 pounds per day option would be inconvenient for those facilities that have long used that threshold to track whether they are subject to existing regulations that use 15 pounds per day as the applicability threshold. However, to clarify the provision, MassDEP has made the following changes in 21 places in the final regulations: "…equal to or greater than ~~**the greater of**~~ 15 pounds of VOC per day or**, in the alternative, equal to or greater than** 3 tons **of VOC** per rolling 12 month period…." This change makes it clear that to avoid applicability a facility can either stay under 15 pounds of VOC emissions per day or stay under 3 tons per rolling 12 month period (even if more than 15 pounds of VOC is emitted on some days).

33. Comment: (ACA) ACA is very concerned about the proposed VOC limit of 1.68 lb/gal (202 g/l) for manufacture of inks, coatings, or resins since this this will not allow effective cleaning at coatings, inks, adhesives and resin manufacturing operations. We appreciate that MA included the 1.68 lb/gal limit (as opposed to 50 g/l), however this limit is only one of the four ACA options that we recommended in the past. While some facilities might be able to use solvent that meets the 1.68 lb/gal limit, others will likely utilize the work practice options in our recommended language (see below) since solvents that meet the 1.68 lb/gal limit are less effective, more expensive, more evaporative, and more flammable than current solvents used today. As a result, there will likely be an increase in VOC emissions if the 202 g/l limit were adopted for these operations (since more solvents will need to be used). ACA recommends MA specifically exempt coatings, ink, adhesives and resin manufacturing operations from the proposed regulations (as Texas has done). Alternatively, ACA suggests adopting the language Wisconsin, Illinois, Ohio, Indiana, North Carolina, Missouri, Virginia have adopted. Note EPA has approved these other states' regulations.

Response: MassDEP agrees and has exempted coatings, inks, adhesives and resin manufacturing from the numeric limits (at 310 CMR 7.18(31)(b)1.k.) as other states have done with EPA approval (i.e., for VOC Content Limitation, Vapor Pressure Limitation and add-on Air Pollution Capture and Control Equipment efficiency). However, MassDEP believes it is appropriate that all facilities comply with work practices such as covering containers containing solvent and, therefore, these common-sense provisions do apply to these types of operations in the final regulations.

34. Comment: (Eversource) MassDEP's proposed VOC RACT amendments include certain definitions, specifically, "Extreme Performance Coating" for "Miscellaneous Metal Parts." The current definition includes " ... coatings designed for harsh or extreme environmental conditions, including but not limited to constant weather exposure ... ."

Eversource Gas Serves approximately 250,000 customers in the Commonwealth, each with a gas meter located outdoors and replaced every seven years. Continuous uninterrupted operation of these meters is critical to safe efficient delivery of natural gas to our customers. Coatings used on

these meters currently qualify as an extreme performance coating application. The proposed new definition no longer includes constant weather exposure. Eversource requests the proposed definition of "Extreme Performance Coating" be amended to include "constant weather exposure."

Response: "Extreme performance coatings" refers to coatings that are exposed to extreme environmental conditions, such as temperatures in excess of 250°F or corrosive, caustic or acidic agents. Mere exposure to weather does not constitute extreme conditions. Therefore, MassDEP did not add the suggested language to the definition.

35. Comment: (Alnylam) The proposed VOC RACT rule for industrial cleaning solvents (310 CMR 7.18(31)) poses significant challenges for Pharmaceutical manufacturing/preparation facilities. The proposed rule has an exemption for "medical device and pharmaceutical manufacturing operations using up to 1.5 gallons per day of solvents." However, this amount of cleaning solvent is not sufficient for a large pharmaceutical manufacturing facility and the proposed requirements of the industrial cleaning RACT cannot be applied to pharmaceutical operations (such as reduced VOC-content of cleaning solution, low vapor pressure cleaning solution or add-on controls).

For example, 70% isopropyl alcohol (IPA) is commonly used for disinfection in the pharmaceutical (and biotechnology) industry but does not meet the proposed RACT requirements. It would be economically infeasible to control these intermittent and difficult-to-capture emissions with add-on controls as required by 7.18(31)(d)3. Therefore, we ask that the 1.5 gallons per day of solvent be stricken from the exemption, such that the exemption reads as follows:

> g. medical device and pharmaceutical manufacturing operations ~~using up to 1.5 gallons per day of solvents~~.

This exemption would then be consistent with New Hampshire and Connecticut regulations, neither of which have a limitation on the amount of solvent used in the exemption.

Response: MassDEP agrees that, given the medical device and pharmaceutical manufacturing industries' extensive use of IPA to meet their cleanliness needs, it is not reasonable to require these industries to meet the proposed VOC RACT limit, and has included an exemption for these industries in the final regulations, similar to what other New England states have done (see 310 CMR 7.18(31)(b)1.g.).

36. Comment: (GAC) Overall, the GAC supports the proposed changes to the RACT rules as several of them clarify applicability which provides for more regulatory certainty, especially the paper film foil surface coating, adhesives, and industrial solvent cleaning rules. Historically, there has been confusion regarding the applicability of these rules to printing operations and these proposed revisions will clarify this confusion.

Response: MassDEP appreciates this comment.

310 CMR 7.00 Definitions

37. Comment: (GAC) The GAC concurs with and supports the proposed changes to the definition of Paper, Foil, and Film Surface Coating as contained in 310 CMR 7.00.

Response: MassDEP appreciates this comment.

38. Comment: (GAC) Letterpress Printing – Please delete the word "paper" and replace it with "substrate" as letterpress printing operations can be used to print on a variety of substrates that include, paper, corrugated, etc.

Response: MassDEP agrees and has changed "paper" to "substrate" in the definition of Letterpress Printing in 310 CMR 7.00 and 7.26(22) of the final regulations.

39. Comment: (GAC) Non-Heatset Offset Lithographic Printing - Please revise the definition by adding the sentence "For the purposes of this section, UV-cured and electron beam-cured inks are considered non-heatset."

Response: MassDEP agrees that UV-cured and electron beam-cured inks should be addressed and therefore made the following changes:

1. MassDEP changed 310 CMR 7.00 "Non-Heatset Offset Lithographic Printing" to read "NON-HEATSET OFFSET LITHOGRAPHIC PRINTING means **an** offset lithographic process that does not require heat to set or dry the ink. **UV-cured and electron beam-cured inks are considered non-heatset.**"
2. MassDEP changed 310 CMR 7.00 "Petroleum Heatset Ink" to read "PETROLEUM HEATSET INK means an ink that is not a water-based**, UV-cured, or electron beam-cured** ink" so that these inks are excluded from the provisions of the new 310 CMR 7.18(25)(a)2.
3. MassDEP notes that UV-cured inks are already addressed in the ERP printing regulations at 310 CMR 7.26(20)-(29), but electron beam-cured inks are not; thus, MassDEP added a definition of electron beam ink and added 13 other occurrences of the term *electron beam* to the ERP regulation, paralleling the existing use of the term *ultraviolet*.

40. Comment: (GAC) Printing Press – Please revise the definition by adding the phrase "including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units" at the end of it so that it reads:

Printing Press means a printing production assembly, with the ability to print one or multiple colors, designed to produce a printed product *including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units*.

Response: MassDEP believes the existing phrase "printing production assembly" encompasses the added examples, and did not add the suggested language to the definition.

41. Comment: (GAC) Please add a definition for batch.

Batch - A supply of fountain solution that is prepared and used without alteration until completely used or removed from the printing process. For the purposes of this rule, this term may apply to solutions prepared in either discrete batches or solutions that are continuously blended with automatic mixing units.

Response: The term "batch" is commonly understood and a definition of "batch" is not needed. In addition, MassDEP does not believe "solutions that are continuously blended with automatic mixing units" would be considered "batch."

42. Comment: (GAC) Please add a definition for VOC Composite Vapor Pressure.

VOC Composite Partial Vapor Pressure - The sum of the partial pressure of the compounds defined as VOCs. VOC composite partial vapor pressure is calculated as follows:

$$PP_c \sum_{i=1}^{n} \left[\left[(W_i)(VP_i) \,/\, MW_i \right] / \left[W_w/MW_w + W_c/MW_c + \sum_{i=1}^{n} W_i/MW_i \right] \right]$$

Where:
W_i = Weight of the "i"th VOC compound, in grams
W_w = Weight of water, in grams
W_c = Weight of exempt compound, in grams
MW_i = Molecular weight of the "i"th VOC compound, in g/g-mole
MW_w = Molecular weight of water, in g/g-mole
MW_c = Molecular weight of exempt compound, in g/g-mole
PP_c = VOC composite partial vapor pressure at 20°C (68°F), in mm Hg
VP_i = Vapor pressure of the "i"th VOC compound at 20°C (68°F), in mm Hg
n = the number of VOC compounds

Response: 310 CMR 7.00 already has a definition of VOC Composite Partial Pressure and applies this calculation at standard temperature (i.e., 20°C), as specified in regulations that use this definition.

310 CMR 7.03(15) (b) Non-heatset Offset Lithographic Printing

43. Comment: (GAC) Please revise the limit in 310 CMR 7.03(15)(b)(2) for web presses by adding the phrase *"and no more than 5% by weight VOC content"* so that it is consistent with the requirements in the CTG for Offset Lithographic Printing and Letterpress Printing.

Response: Existing 310 CMR 7.03(15)(b)8. already contains a fountain solution limit of 2.5% by volume, which industry has been complying with for decades. It would be backsliding to replace it with a higher limit; therefore, MassDEP did not revise the limit. However, MassDEP replaced "by volume" with "by weight" in the final regulation (see Response to Comment 44).

44. Comment: (GAC) Please revise the VOC content limits for fountain solution in 310 CMR 7.03(15) (b)(4) by deleting the words "by volume" replacing them with "by weight." This change

would place the limits on a consistent basis with the CTG for Offset Lithographic Printing and Letterpress Printing and the recordkeeping requirements in 310 CMR 7.03(15)(d)(1). The revision also makes compliance demonstration much easier as VOC emissions are determined on a weight basis. This change would not represent a backsliding situation as the limits are virtually equivalent and compliance determination is much easier if the limits are on a by weight basis.

Response: MassDEP agrees and replaced "% by volume" with "% by weight" throughout the final 310 CMR 7.03(15) regulations. MassDEP agrees that this change does not represent backsliding, as indicated in the August 12, 2016 Technical Support Document, which stated, "Section 110(l) of the CAA only allows revisions to SIP requirements if such revisions do not interfere with attaining air quality standards (known as the "anti-backsliding" provision). Because the amendments also include emission limits for some large use categories (i.e., one component and multicomponent general use coatings) that are more stringent than MassDEP's current regulations, MassDEP believes (based on EPA guidance) that these more stringent limits on higher use coatings offset the less stringent specialty coating limits; therefore, the regulations as a whole avoid backsliding."

45. Comment: (GAC) Please delete "fountain additives" in 310 CMR 7.03(15)(d)(1) and replace it with "fountain solution concentrate" and "fountain solution alcohol substitute" so that it is clear that both materials need to be included in the records.

Response: MassDEP agrees that the additional text adds clarity, and added it in the final regulation at 310 CMR 7.03(15)(e)1. Also, MassDEP notes that the definition of "propanol substitute" in 310 CMR 7.00 was inadvertently not updated to "alcohol substitute" to parallel the proposed regulations' replacement of "propanol" with "alcohol." For consistency, MassDEP replaced the 310 CMR 7.00 definition of "propanol substitute" with the definition of "alcohol substitute" used in the Environmental Results Program, 310 CMR 7.26(20) through (29).

46. Comment: (GAC) Please add a provision to 310 CMR 7.03(15)(d)(1) that allows for an alternate approach for having to keep records on each and every ink, coating, and other input materials. In lieu of tracking each material, the covered facility should be allowed to group materials into a single class of similar materials and use the highest VOC content for that class of materials as a means to reduce the overall recordkeeping. The provision would read:
1. Identity, formulation (percent VOC by weight as determined by manufacturer's formulation data or EPA Method 24 or 24A test), and quantity (gallons per calendar month) for each VOC-containing compound **or class of compounds** used at the facility, including, but not limited to:
…
When determining the VOC content or other property for each material in a class of similar compounds use the specifications for the material which has the highest VOC content in that class.

Response: MassDEP did not make the suggested change. In order for MassDEP inspectors to verify compliance during an inspection, records of the quantity used and VOC content of each individual material are necessary. If VOC content records of only the highest VOC content materials for each class of compounds were retained, inspectors would have no way to confirm that the retained records represent the highest VOC content material. Also, using the highest

VOC content could lead to an inappropriate conclusion that a facility has higher emissions than it in fact does, subjecting it to requirements for facilities with higher emissions. Therefore, MassDEP did not revise the provision as suggested.

310 CMR 7.18(2)(a) Compliance With Emission Limitations

47. Comment: (GAC) Please add a footnote to the table indicating that Method 24A is to only be used for publication rotogravure inks and related coatings.

Response: The appropriate test method to use would be determined by MassDEP and a facility at the time of a test; therefore, MassDEP did not add the suggested footnote.

48. Comment: (GAC) It is not clear what the definition of "related materials" in the entry that states Coatings, Inks and Related Materials Formulation. This term needs to be moved in the statement so that it appears before "Coatings" so that it is consistent with the manner in which both Method 24 and 24A use the term to describe coatings. For example Method 24A's title states "Method 24A - Determination of Volatile Matter Content and Density of Publication Rotogravure Inks and Related Publication Rotogravure Coatings."

Response: The table gives some examples (coatings and inks) of materials that might be tested with Test Method 24 or 24A. Other related material examples are paint, varnish and lacquer. MassDEP believes the text does not need to list additional materials and finalized the table as proposed.

310 CMR 7.18(12) Packaging Rotogravure and Packaging Flexographic Printing

49. Comment: (GAC) Please modify 310 CMR 7.18(12)(d)(2)(b) by modifying the requirement from in line averaging by also allowing cross line averaging by adding the phrase "*or all presses in the facility."* This approach allows for maximum flexibility for facilities that are subject to the requirements and is acceptable to EPA as described in their guidance *Improving Air Quality with Economic Incentive Programs*. U.S. Environmental Protection Agency. Research Triangle Park, NC. EPA-452/R-01-001. January 2001.

Response: The September 2006 Flexible Package Printing CTG on page 14 indicates, "The use of averaging to meet the VOC content limits is not recommended for cross-line, i.e., across multiple lines." Therefore, MassDEP did not add the suggested text.

50. Comment: (GAC) Please add a provision to 310 CMR 7.18(12)(g) that allows for an alternate approach for having to keep records on each and every ink, coating, and other input materials. In lieu of tracking each material, the covered facility should be allowed to group materials into a single class of similar materials and use the highest VOC content for that class of materials as a means to reduce the overall recordkeeping.

Please delete the requirement to record the amount of product produced as there is no regulatory requirement that would make this record necessary. The provision would read (all changes in bold):

(g) Recordkeeping Requirements Any person…….

Such records shall include, but are not limited to:
1. identity, quantity, formulation and density of ink(s), coating(s) and adhesive(s) **or class** used;
2. identity, quantity, formulation and density of any diluent(s) and clean-up solvent(s) **or class** used;
3. solids content of any ink(s)**,** coating(s) and adhesive(s**) or class** used;
4. actual operational and emissions characteristics of the printing line and any appurtenant emissions capture and control equipment;
~~**5. quantity of product processed; and**~~
~~**6**~~**5**. any other requirements specified by the Department in any approval(s) or order(s) issued to the person.
When determining the VOC content or other property for each material in a class of similar compounds use the specifications for the material which has the highest VOC content in that class.

Response: MassDEP did not make the suggested change. In order for MassDEP inspectors to verify compliance during an inspection, records of the quantity used and VOC content of each individual material are necessary. If VOC content records of only the highest VOC content materials for each class of compounds were retained, inspectors would have no way to confirm that the retained records represent the highest VOC content material. Also, using the highest VOC content could lead to an inappropriate conclusion that a facility has higher emissions than it in fact does, subjecting it to requirements for facilities with higher emissions. The quantity of product processed is required if needed to determine emissions. Therefore, MassDEP revised eight occurrences of this provision throughout the 310 CMR 7.18 sections opened for public comment, as follows: "quantity of product processed**, if necessary to determine emissions**; and."

310 CMR 7.18(25) Offset Lithographic Printing and Letterpress Printing

51. Comment: (GAC) Please revise the requirement in 310 CMR 7.18(25)(c)(b)(2)(a) that requires a facility to obtain a federally enforceable permit to restrict the potential emissions of a heatset web offset press to less than 25 tons per year. In some instances, this may be the only option for a printing operation where they would have a large multi-color press, but that is not always accurate. In some instances, the presses potential emissions do not exceed 25 tons per year so requiring the facility to obtain a federally enforceable limit would impose significant administrative and economic burdens that are not necessary. Therefore, the condition should be revised to state that the federally enforceable permit should be obtained only when the potential emissions exceed 25 tons of VOC emissions and one is not required if the potential emissions do not exceed 25 tons of VOC emissions.

Response: MassDEP believes the suggested revision is unnecessary. 310 CMR 7.18(25)(a)2. applies only to a heatset web printing press that has potential VOC emissions greater than 25 tons per year, with the option under 310 CMR 7.18(25)(c)2.a. to obtain a federally enforceable emission limitation below 25 tons per year in order to not be subject to 310 CMR 7.18(25)(a)2. If

the potential emissions of the press do not exceed 25 tons per year, then the press would not be subject to 310 CMR 7.18(25)(a)2. and the owner would have no need to choose to obtain a federally enforceable emission limitation.

52. Comment: (GAC) Please revise the VOC content limits for fountain solution in 310 CMR 7.18(25)(g) and (h) by deleting the words "by volume" replacing them with "by weight." This change would place the limits on a consistent basis with the CTG for Offset Lithographic Printing and Letterpress Printing and it makes compliance demonstration much easier as VOC emissions are determined on a weight basis. This change would not represent a backsliding situation as the limits are virtually equivalent and compliance determination is much easier if the limits are on a by weight basis.

Response: MassDEP agrees and replaced "% by volume" with "% by weight" throughout the final 310 CMR 7.18(25) regulations. MassDEP agrees that this change does not represent backsliding, as indicated in the August 12, 2016 Technical Support Document, which stated, "Section 110(l) of the CAA only allows revisions to SIP requirements if such revisions do not interfere with attaining air quality standards (known as the "anti-backsliding" provision). Because the amendments also include emission limits for some large use categories (i.e., one component and multicomponent general use coatings) that are more stringent than MassDEP's current regulations, MassDEP believes (based on EPA guidance) that these more stringent limits on higher use coatings offset the less stringent specialty coating limits; therefore, the regulations as a whole avoid backsliding."

53. Comment: (GAC) Please revise the limit in 310 CMR 7.18(25)(i) by deleting 2.5% and replace it with 5% so that it is consistent with the CTG for Offset Lithographic Printing and Letterpress Printing.

Response: Existing 310 CMR 7.18(25)(i) already contains a fountain solution limit of 2.5%, which industry has been complying with for decades. It would be backsliding to replace it with a higher limit; therefore, MassDEP did not revise the limit.

54. Comment: (GAC) Please revise the limit in 310 CMR 7.18(25)(j) by deleting 3.0% and replace it with 5% so that it is consistent with the CTG for Offset Lithographic Printing and Letterpress Printing.

Response: Existing 310 CMR 7.18(25)(j) already contains a fountain solution limit of 3.0%, which industry has been complying with for decades. It would be backsliding to replace it with a higher limit; therefore, MassDEP did not revise the limit.

55. Comment: (GAC) Please revise the cleaning solvent limit in 310 CMR 7.18(25)(m)(2)(a) by deleting "30%" and replacing it with "70%" per the CTG for Offset Lithographic Printing and Letterpress Printing requirements for cleaning solutions. Although this limit was originally included in the 1993 draft CTG for Offset Lithography, it was subsequently superseded by the 70% by weight limit with the issuance of the 2006 CTG for Offset Lithographic Printing and Letterpress Printing, when the printing industry demonstrated to EPA that the 30% by weight

VOC content limit in the 1993 CTG for Offset Lithographic Printing did not constitute an achievable technology and therefore EPA revised the limit to 70% by weight.

Response: MassDEP agrees and replaced "30%" with "70%" in three places in the final regulations, consistent with the 2006 Offset Lithographic Printing and Letterpress Printing CTG (see 310 CMR 7.03(15)(c)1.a., 7.18(25)(m)2.a. and 7.26(24)(c)2.a.). Facilities have historically complied with the cleaning solutions provision by following the VOC composite partial pressure standard, and not the 30% VOC content standard; therefore, changing the 30% standard does not represent backsliding. MassDEP notes that EPA has approved the 70% standard in Connecticut's regulations.

56. Comment: (GAC) Please revise the cleaning solvent limit in 310 CMR 7.18(25)(m)(2) by including a new provision (c) that allows for the use of 110 gallons per calendar year of non-compliant cleaning materials. This is due to the nature of the equipment being cleaned, and cleaning solutions that meet the requirements of 310 CMR 7.18(25)(m)(2)(a) and (b) are sometimes not adequate to achieve the level of cleaning required. The use of those cleaning solutions on a limited basis by all printing operations was recognized by USEPA and was included in its CTG as seen on Page 3 of the CTG where USEPA states:
"…the cleaning control approaches recommended in this CTG include limitations on the VOC composite vapor pressure of cleaning materials and limits on the VOC content of cleaning materials, with an exclusion of 110 gallons per year of cleaning materials which meet neither the low VOC composite vapor pressure recommendation nor the lower VOC content recommendation, and work practices."

Based on the above, 310 CMR 7.18(25)(m)(2)(c) would read as follows:

Cleanup solutions not meeting the limits in 7.18(25)(m)(2)(a) and (b) are limited to less than or equal to 110 gallons per calendar year.

Response: MassDEP proposed this approach in 310 CMR 7.18(25)(c)4. However, the proposal only provided an exemption for persons subject to 310 CMR 7.18(25)(a)4., when it should also have provided that exemption for persons subject to 310 CMR 7.18(25)(a)1., as both sections require compliance with cleanup solution limits. MassDEP finalized 310 CMR 7.18(25)(c)4. to read "Any person subject to 310 CMR 7.18(25)(a)**1. or** 4. may use up to 110 gallons per rolling 12 month period of cleaning materials that do not meet 310 CMR 7.18(25)(m)2."

57. Comment: (GAC) Please modify the recordkeeping requirements in 310 CMR 7.18(25)(o) so that they are consistent with those required by the limits in the subsection and the CTG for Offset Lithographic Printing and Letterpress Printing. For example, 310 CMR 7.18(25)(o)(1) is requiring a subjected facility to track the identity, formulation, density, and quantity for each VOC containing material used. There are no existing requirements in 310 CMR 7.18(25) that require this type of recordkeeping. The compliance burden of this requirement is not commensurate with the requirements.

Likewise, there is not a requirement in the subsection that would require the collection of records to indicate the VOC content for each material used on each press as required in 310 CMR

7.18(25)(o)(5) and all presses as required in 310 CMR 7.18(25)(o)(6). Therefore, these two conditions should be deleted.

The only records that need to be kept are the VOC content and vapor pressure of cleanup solutions. If the exclusion for the 110 gallons of cleanup solutions not meeting 7.18(25)(m)(2)(a) and (b) is accepted, then the quantity of the cleanup solutions not meeting the requirements would have to be recorded on a monthly basis.

Response: MassDEP did not make the suggested change. MassDEP believes the records required will help ensure compliance. In order for MassDEP inspectors to verify compliance during an inspection, records such as the quantity used and VOC content of each individual material are necessary. For example, to determine compliance with the fountain solution % by weight VOC limits in 310 CMR 7.18(25)(g) through (j), the facility would need to know the quantity and % VOC formulation of each alcohol, alcohol substitutes and fountain solution concentrate used, to calculate the overall fountain solution VOC % by weight. Therefore, MassDEP did not make the suggested changes.

58. Comment: (GAC) Please modify the recordkeeping requirements for 310 CMR 7.18(25)(o)(3) by deleting "by volume" and replacing it with "by weight" and to allow the records to be maintained on a batch or recipe basis.

Response: Since MassDEP changed the fountain solution standards to "by weight," MassDEP also changed the record-keeping standards to "by weight." MassDEP agrees it is reasonable to keep fountain solution records on a batch or recipe basis, and therefore finalized 310 CMR 7.03(15)(e)2. to read "…each time alcohol or alcohol mix is added to the system ~~**but no less than once per day**~~;" and 310 CMR 7.18(25)(o)3. to read "For offset lithographic printing presses the percent of VOC by volume in the fountain solution as monitored whenever new fountain solution is mixed~~**,**~~ **or** alcohol is added to the fountain solution~~**, or daily, whichever is more frequent**~~;."

310 CMR 7.18(31) Industrial Cleaning Solvents

59. Comment: (GAC) To maintain consistency with other state industrial solvent cleaning regulations, the GAC recommends that cleaning activities associated with digital printing be exempt from the rule's requirements. Emissions from cleaning operations associated with digital printing equipment are minimal. Further, digital printing was not recognized by the US EPA as a source category for implementation of this CTG. Other states, such as Connecticut, Illinois, Indiana, Ohio, Maryland, and Wisconsin have adopted similar language exempting this cleaning activity.

Response: Page 4 of the Industrial Cleaning Solvent CTG states "this CTG is intended to cover all industrial cleaning operations," which would include digital printers. Thus, MassDEP's final regulation includes Work Practices for Cleaning Operations that digital printers must follow. However, MassDEP agrees that digital printing cleaning operations should not be subject to numerical limits, and MassDEP has amended the final regulation at 310 CMR 7.18(31)(b)1.c.v., so that it exempts digital printing cleaning activities from numeric emissions limits (i.e., for

VOC Content Limitation, Vapor Pressure Limitation and add-on Air Pollution Capture and Control Equipment efficiency), since EPA has approved this approach in other states. A definition of Digital Printing has therefore been added to the final regulation.

310 CMR 7.26(20) Environmental Results Flexographic, Gravure, Letterpress and Screen Printing

60. Comment: (GAC) The GAC recommends the addition of digital printing to the list of covered printing operations. Inclusion of digital printing in this section provides clear direction and consistency in the regulatory approach for those printing facilities that are including digital printing applications.

To further clarify the printing process(es) included in this category of digital, it is recommended that the following definition be included in 310 CMR 7.26(20):

Digital Printing: A print-on-demand method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing and solid ink printing.

Response: MassDEP will evaluate whether digital printing operations should be added to the ERP printing regulations and will consider future regulation amendments if warranted.

61. Comment: (GAC) Please revise the definition of "Very Small Printer" in 310 CMR 7.26(22) to include digital printing. The proposed change would provide better clarity to the definition and would read as follows (all changes are bold):

Very Small Printer means a printer that:
a) is connected to a municipal sewer;
b) uses no more than 55 gallons of cleanup solution and inks/coatings/adhesives with a VOC content greater than 10% by weight as applied per rolling 12-month period **(incidental material, ink used in nonheatset offset lithographic printing, water-based ink/coating/adhesive, and digital inks. Plastisol and ultraviolet ink are excluded from this calculation)**;
(c) uses no more than 55 gallons of alcohol per rolling 12-month period; and
(d) generates not more than 55 gallons of hazardous waste per 12-month period.
~~**Incidental material, ink used in non-heatset offset lithographic printing, water-based ink/coating/adhesive, plastisol and ultraviolet ink are excluded from this calculation**~~.

Response: MassDEP did not make this change, but will evaluate whether digital printing operations should be added to the ERP printing regulations and will consider future regulation amendments if warranted.

62. Comment: (GAC) The proposed revisions in 310 CMR 7.26(23)(a)(2), 310 CMR 7.26(23)(a)(3) and 310 CMR 7.26(27)(c) regarding the superseding of conditions in a plan approval or permit should be deleted. There are several concerns with this condition with the first being how a permitted facility will know when this occurs. Changing the requirements in an

existing plan approval or permit that have been carefully negotiated with notification to the permitted entity is not appropriate as they would be subject to an enforcement action with no knowledge that a requirement would have been changed. The other main concern with this requirement is that when a plan approval or permit is issued, the conditions are developed on a case-by-case basis considering limitations, equipment configuration, and many other items and changing those requirements via a rule may present a situation where the facility would not be able to comply with the rule's requirements. Therefore, this part of the proposed revision needs to be deleted.

Response: MassDEP did not make this change. When new RACT regulations are issued, they apply to existing facilities and existing facilities must comply with the regulations or seek a facility-specific approval for alternative emissions limits. It is the responsibility of a facility to keep up to date with the promulgation of new environmental regulations that apply to their operations, including RACT regulations. 310 CMR 7.26(23)(a)4. provides a two year timeframe for facilities to come into compliance with the new RACT emissions limitations if they find that their plan approval limits or applicable limits under 310 CMR 7.26 are less stringent than the new RACT emissions limitations.

63. Comment: (GAC) Please revise 310 CMR 7.26(24)(c)(2)(a) by deleting 30% and replacing it with 70%.

Response: MassDEP agrees and replaced "30%" with "70%" in three places in the final regulations, consistent with the 2006 Offset Lithographic Printing and Letterpress Printing CTG (see 310 CMR 7.03(15)(c)1.a., 7.18(25)(m)2.a. and 7.26(24)(c)2.a.). Facilities have historically complied with the cleaning solutions provision by following the VOC composite partial pressure standard, and not the 30% VOC content standard; therefore, changing the 30% standard does not represent backsliding. MassDEP notes that EPA has approved the 70% standard in Connecticut's regulations.

64. Comment: (GAC) Please revise 310 CMR 7.26(28)(b)(5), 310 CMR 7.26(28)(c)(4), and 310 CMR 7.26(28)(c)(6) by deleting "measured" and replace it with "determined" as using the word measured implies a test needs to be conducted every time a batch of fountain solution is prepared. Since the VOC content can be determined based on manufacturer's analytical data and mix ratios, determined is a better way to describe the approach.

Response: MassDEP agrees and replaced "measured" with "determined" in three places in 310 CMR 7.26(28) and once in 310 CMR 7.03(15)(d)2. in the final regulations.

65. Comment: (GAC) Please revise 310 CMR 7.26(28)(c)(3) by including the allowance for a 50% retention of VOC in shop towels that are used in conjunction with cleaning solutions that have a composite VOC vapor pressure of less than 10 mm Hg at 20^{o}C (68^{o}F).

On Page 19 of the 2006 final CTG for Offset Lithographic Printing and Letterpress Printing EPA states:
B. Retention of Low VOC Composite Vapor Pressure Cleaning Materials in Shop Towels

We recommend using a 50 percent VOC retention factor for low VOC composite vapor pressure cleaning materials in shop towels where (1) VOC composite vapor pressure of the cleaning material is less than 10 mm Hg at 20 ºC, and (2) cleaning materials and used shop towels are kept in closed containers.

The retention factor for shop towels would apply to all print processes as affirmed by EPA in the Technical Support Document for Title V Permitting of Printing Operations. On Page 11, EPA states:

Are non-lithographic processes eligible for use of a retention factor where low vapor pressure cleaning solvents are used?

Yes. The 50 percent retention factor use is available for all flexographic, rotogravure, letterpress, and screen printing operations, consistent with our June 1994 guidance, "Alternative Control Technique Document: Offset Lithographic Printing."

Response: MassDEP agrees and added the 50% retention factor for shop towels when used with low VOC composite vapor pressure cleaning materials in the final regulations (see 310 CMR 7.26(28)(c)3.).

66. Comment: (GAC) Please revise 310 CMR 7.26(28)(c)(8) by deleting "MSDSs" and replace it with "SDSs" as OSHA has revised its hazard communication standard and has replaced MSDSs with SDSs.

Response: MassDEP agrees and in the final regulations replaced "MSDSs" with "SDSs" in six places and replaced "material safety data sheet" with "safety data sheet" in the 310 CMR 7.00 definitions of "adhesion primer" and "electrostatic preparation coating."

Other Changes:

MassDEP corrected references in 310 CMR 7.03(15) to read "and in 310 CMR 7.03(15)(**d**e) **and (f)**, and to the recordkeeping requirements in 310 CMR 7.03(15)(**e**~~d~~)."

MassDEP corrected the spelling of "difluoromethane" in the 310 CMR 7.00 definition of "volatile organic compound," by adding the missing letter "l."

Where regulations adopt technical standards, the Massachusetts Secretary of the Commonwealth requires the use of the most recent version available. Therefore, MassDEP revised occurrences of ASTM D523-08 to ASTM D523-14, AAMA 2604-05 and 2605-05 to AAMA 2604-17 and 2605-17, and ANSI A135.5-2004 to ANSI A135.5-2012. Also, the incorrect title "Architectural Aluminum Manufacturer Association" in the definition of "High-Performance Architectural Coating" has been corrected to "American Architectural Manufacturers Association."

SOLVENT DEGREASING – 310 CMR 7.18(8)

67. Comment: (Ramboll Environ) MassDEP is proposing to add a fourth option under which a solvent with a vapor pressure of greater than 1.0 mm Hg may be used, namely:

d. cold cleaning degreasers used in the cleaning of high precision products for which the owner or operator has received Department and EPA approval.

We request that the word "and" currently proposed between (8)(a)1.c and (8)(a)1.d be changed to "or", so it is only required for facilities to meet one of the four criteria rather than all four.

Response: MassDEP believes in context the word "and" is appropriate, but has added the phrase "to any of " prior to the listing of a. – d. to make clear that if any of the conditions listed are met the mercury vapor pressure requirement does not apply.

68. Comment: (Ramboll Environ) In addition, we request clarification on the new condition that has been added to (8)(e)3.i where spray operations with non-continuous fluid stream or pressure greater than 10 psi may be used if the amount of solvent consumed in such spray operations at the premises is limited to "less than 3,000 gallons in any 12-month period, excluding solvent captured and recycled." Please provide clarification on what is meant by "captured and recycled." If the solvent is captured and disposed of as hazardous waste, would this be considered "captured and recycled?" We believe it should, as the VOC emissions are the same either way.

Response: MassDEP added the word "on-site" after "captured and recycled" in the final regulations to clarify that solvent captured in an on-site still and then reused in the cleaning process would be considered "captured and recycled," and therefore exempt from the 3,000 gallon per 12-month period requirement, but that solvent that is captured and disposed of would not be considered "captured and recycled." The intent of the regulation is to limit air emissions and to encourage recycling of solvent on-site.

NOx RACT – 310 CMR 7.19

69. Comment: (EPA) Section 310 CMR 7.19(2)(b) provides a list of NOx control options for sources that seek an alternative RACT limit. One of the items in this list, 7.l9(2)(b)(16), reads as follows:

"use of emission reduction credits (ERCs) certified by the Department pursuant to 310 CMR 7.00: Appendix B(3), or pursuant to the interstate trading provisions at 310 CMR 7.00: Appendix B(3)(f)."

To maintain this as a NOx Reasonably Available Control Technology (RACT) compliance option going forward, the ERCs allowed to be used should be limited to ERCs generated by sources subject to the updated RACT requirements that reduce their emissions below the new, presumptive RACT levels. This requirement is described within EPA's Economic Incentive Program guidance (see section 16.13 of "Improving Air Quality with Economic Incentive Programs"; January, 2001). Massachusetts should either remove this as a RACT compliance option, or revise it by limiting the type of ERCs allowed with the above restriction. The presumptive RACT level used to calculate ERCs should be the RACT levels Massachusetts adopts via this rulemaking proceeding, not emission limits from prior versions of the Commonwealth's RACT regulations which, in some cases, are less stringent.

Response: MassDEP agrees that the presumptive RACT level adopted in the final regulations must be used to calculate ERCs, rather than RACT levels from prior versions of the RACT regulations, which in some cases are less stringent.

The regulations in 310 CMR 7.00 Appendix B lay out the procedures for generating ERCs for compliance with 310 CMR 7.19. In Appendix B(2) "Baseline means the emission level set for an eligible source and calculated in accordance with methods described in 310 CMR 7.00: Appendix B(3)(c), which reflects the lower of actual emissions, or allowable emissions and which serves as the level below which emission reductions are considered surplus and can be eligible for approval by the Department as ERCs. As future allowable emission rates or emission standards become effective, the lowest of future allowable emissions, allowable emissions or actual emissions will be the baseline below which reductions must be made to be considered surplus."

An owner or operator who wants to use previously banked ERCs for complying with the new emissions limits in 310 CMR 7.19 must submit an new Emission Control Plan to MassDEP for review and approval. In such case, MassDEP will require the owner or operator to review the original basis for the creation of the banked ERCs. MassDEP has made changes to 310 CMR 7.19(2)(g) to state that if the ERCs were generated due to reductions by a large boiler, combustion turbine, or internal combustion engine for which the standards have become more stringent, MassDEP will require recalculation of their value based on the new standards. MassDEP also changed 310 CMR 7.19(3)(a)1. to clarify that the owner or operator of a facility that proposes to use ERCs to comply with the new presumptive NOx RACT emission standards must apply for a new Emission Control Plan. These changes will ensure that MassDEP will be able to review the use of ERCs and ensure that the ERCs are based on the new presumptive NOx

RACT emission standards, consistent with EPA's "Improving Air Quality with Economic Incentive Programs."

70. Comment: (EPA) The Commonwealth's proposed revisions include a number of exemptions that apply to emission units that operate less than 1,000 hours per year, or that operate with annual capacity factors of less than 10%. The proposed revisions require any source that uses such an exemption but subsequently exceeds it to comply with the applicable, previously avoided emission limit within 2 years. It is likely that some sources that become subject to these emission limits could meet the requisite emission limit sooner than this, and should be required to do so if at all possible. Massachusetts could accomplish this by modifying the triggering provision by requiring compliance be achieved within 1 year, unless the source requests, and is granted, additional time to meet the requisite emission limit. If additional time is granted, it should be limited to no more than 2 years from the date of the triggering event.

Response: MassDEP believes two years is an appropriate timeframe for compliance once RACT requirements are triggered in light of the time needed to install retrofit controls to meet RACT emission limits. MassDEP will not allow extensions to the 2-year deadline unless exceptional circumstances are demonstrated to MassDEP.

71. Comment: (EPA) With regard to alternative RACT requirements, section G of the Background Document notes that source specific RACT determinations will be added to a facility's Emission Control Plan, which would then be submitted to EPA as a single source SIP revision, and that EPA will hold a public comment period on the revision as part of its approval process. We note that the Commonwealth would also need to hold a public comment period and offer the opportunity for a public hearing, as that is a necessary component of any SIP submittal.

Response: MassDEP agrees and will hold a public comment period and, if requested, a public hearing prior to submitting a single source SIP revision to EPA.

72. Comment: (EPA) The provision added at section 310 CMR 7.19(1)(c)(l2) exempts large boilers and combustion turbines with annual capacity factors of less than 10% from the newly proposed, tightened NOx emission limits. This is being done in light of the higher control costs associated with requiring reductions at such infrequently run units. However, although these units are not frequently run on an annual basis, those boilers and turbines used to generate electricity may still be called upon to run during days when the area is experiencing high ozone levels. We note, for example, that most of the electric generating boilers in Massachusetts that burn residual oil have low capacity factors and are uncontrolled. We suggest Massachusetts work with the region's electrical dispatch authority, ISO-New England, to evaluate the feasibility of reducing, or ideally eliminating, the need for large, uncontrolled electric generating units to operate on days forecast to have poor air quality. If this can be accomplished while maintaining sufficient electrical capacity in the region, Massachusetts should consider modifying this exemption in a way that limits or precludes their operation during days with poor air quality.

Response: Massachusetts is taking many steps to increase energy efficiency and renewable energy so that it will be less likely that ISO-New England will dispatch large uncontrolled

sources on days when ozone levels are elevated. MassDEP will continue to evaluate whether additional actions are needed to address emissions from the electricity grid on high ozone days.

73. Comment: (EPA) The new provisions applicable to large boilers, turbines, and reciprocating internal combustion engines (RICE) only apply to units that operate with an annual capacity factor of 10% or more for boilers and turbines, or, for RICE units, operate for 1,000 hours per year or more. Since these exemptions are proposed to apply on a per unit basis, a source could operate multiple units below these thresholds and remain exempt from the more stringent emission limits. Massachusetts should consider restructuring these requirements on a facility-wide basis, such that if collectively the boilers, turbines, or RICE units at a facility exceed the relevant threshold, the more stringent emission limits would become applicable.

Response: Although general applicability of the RACT regulation is based on facility-wide emissions, a RACT analysis and the resulting emissions standard is focused on a specific category of equipment, including its technology type and operating characteristics. Likewise, MassDEP believes a per-unit, categorical basis for exemption is most appropriate.

74. Comment: (EPA) In its RACT certification, Massachusetts should review its previously issued single source NOx RACT SIP revisions to ensure that they are still sufficient for meeting RACT. In particular, any such sources for which it was previously determined that no feasible emission reductions existed, and therefore RACT involved no emission controls, should be reviewed to determine whether that conclusion is still valid.

Response: MassDEP will ensure that the previously issued single source SIP revision approvals are still sufficient for meeting RACT, including review of air pollution controls that may be feasible now.

75. Comment: (EPA) Massachusetts should include within its RACT certification an analysis of whether controls currently required by the state's existing suite of NOx regulations are performing adequately. One means to accomplish this would be to review data from continuous emissions monitors (CEMs) available from EPA's Clean Air Markets Program, or other emissions monitoring data over a span of several years and observe whether any noticeable increase in emission rate has occurred. This could come about for various reasons, such as the degradation of a catalyst (for units controlled by selective catalytic reduction (SCR)), deterioration of control equipment effectiveness as the equipment ages, or non-use of controls for economic reasons. For example, emission units K2 and K4 at Kneeland Station both operate NOx control technology, and the NOx emission rates for both units in 2015 were considerably higher than what was achieved in recent, prior years.

Response: MassDEP will review data in EPA's Clean Air Markets Division emissions database as part of determining and certifying the effectiveness of existing NOx controls.

76. Comment: (EPA) EPA commends MassDEP for proposing more stringent NOx emission limits. As noted in the Background Document, these limits have already been implemented by either Connecticut and/or New York (depending on the type of unit) and thus would appear "reasonably available." EPA supports these tighter limits. However, it is not clear why in the

case of large boilers, MassDEP is proposing to adopt limits implemented by New York in 2014, with one exception. Specifically, Massachusetts is proposing a 0.15 lb/MMBtu limit for face-fired gas fired boilers greater than 250 MMBtu/hr, whereas New York's limit is 0.08 lb/MMBtu for these units. Massachusetts should either adopt the more stringent 0.08 lb/MMBtu limit for these units or include information in its SIP submittal that justifies why MassDEP believes the 0.15 lb/MMBtu limit represents RACT for the subject units in Massachusetts.

Response: MassDEP recognizes that New York's emissions limits for face-fired gas fired boilers greater than 250 MMBtu/hr represent current NOx RACT. However, in Massachusetts there are no large face-fired gas-only fired boilers greater than 250 MMBtu/hr to which a 0.08 lb/MMBtu RACT emission limit would apply. Based on MassDEP's review of other state RACT emission limits, including New York's limits for boilers firing oil and gas, MassDEP has concluded that NO_x RACT for large boilers with both gas and oil firing capabilities is 0.15 lb/MMBtu.

77. Comment: (SC) Allowing facilities that installed controls under 310 CMR 7.29 to use a monthly averaging time instead of a daily averaging time for determining compliance is not appropriate. New York, Delaware and Connecticut NOx RACT emission limits all require 24-hour averaging times, which is critical to reducing ozone precursors on high energy demand days when emission reductions are most needed. Allowing a monthly averaging time creates an unhelpful precedent, since Massachusetts has a vested interest in ensuring that upwind states operate and optimize their controls at all times and establish daily emission limitations.

Response: The provision for the owner or operator of a facility with NOx controls installed to comply with 310 CMR 7.29 to use a rolling 30-day averaging period for RACT NOx compliance is written very narrowly and MassDEP believes it should not set a precedent for other states or facilities. Canal station is the only operating facility subject to 310 CMR 7.29 that has installed NOx controls, and therefore only Canal Station can take advantage of the 30-day averaging period.

MassDEP's review of Canal Station's recent continuous emissions monitoring system (CEMS) data suggests it would be very difficult for these units to meet the lower NOx RACT limit on a daily average basis. Canal Station unit 1 has SCR installed and unit 2 has SNCR installed to control NOx to comply with 310 CMR 7.29. For the most recent three-calendar-year period 2014-2016, the average capacity factor of each unit was less than 10%. MassDEP believes that if the capacity utilization of either unit exceeds 10%, it is unreasonable to require additional NOx controls to meet the emissions limits on a daily basis given the advanced NOx controls already installed. EPA allows up to a 30-day averaging period for compliance with RACT provided that the longer averaging period is assured to not result in violation of the ozone NAAQS. Massachusetts is in attainment of the 2015 ozone standard and does not contribute to downwind ozone nonattainment or maintenance issues based on EPA's most recent modeling ["Notice of Availability of the Environmental Protection Agency's Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone NAAQS"].

78. Comment: (SC) The Sierra Club urges the Department to follow Connecticut's lead in establishing a presumptive cost-effectiveness threshold for case-by-case RACT determinations.

Under Connecticut's proposed NOx RACT regulation, facilities that elect to comply based on a case-by-case RACT demonstration must make a demonstration of technological or economic infeasibility if they decline to install an available control technology. A technology is "presumed economically feasible" for Phase 1 RACT if the cost per ton of NOx reduced is equal or less than $13,118 and for Phase 2 RACT if the cost per ton of NOx reduced is equal or less than $13,636 Importantly, the evaluation of cost of each feasible control alternative is made on an annualized full load basis, assuming 8,760 hours of operation per year, unless the emission unit is subject to a practically enforceable limitation on operation. Establishing a clear and robust cost-efficacy threshold similar to Connecticut's is important not only to ensure adequate control of in-state pollution sources, but also to ensure adequate control of out-of-state pollution sources as well. As noted above, Massachusetts is impacted by pollution from a number of upwind states. As these states implement their own RACT requirements for large sources, they will be looking to Massachusetts to ensure they are not over-controlling their sources. Massachusetts should emulate Connecticut in setting a beneficial example by establishing a robust presumptive cost-effectiveness threshold and ensure that the Commonwealth will benefit from a level playing field.

Response: While MassDEP can take into account RACT decisions in other states (and the basis of those decisions in terms of cost per ton of NOx reduced), MassDEP has not in the past adopted cost-specific thresholds and did not propose to do so in these regulations. Determining alternative RACT levels requires a case-by-case analysis and decision, and a single cost threshold may not be suitable for every RACT determination.

79. Comment: (DSG) Within 310 CMR 7.19(13)(b), language was added stating that a facility may choose to certify and maintain their CEMS in accordance with 40 CFR 75 in lieu of 310 CMR 7.19(13)(b)1. through (b)12. To clarify that paragraphs (b)1. through (b)12. do not apply to facilities complying with 40 CFR 75 but not otherwise subject to 40 CFR 75, we would propose updating the last sentence of paragraph (b) by incorporating the bolded language below:

> …Any person demonstrating compliance with 310 CMR 7.19 for emission units using CEMS who is not subject to **or choosing to follow** 40 CFR 75 shall:

Response: MassDEP agrees and has made the suggested change in the final regulations.

80. Comment: (DSG) Please confirm there are no PMA requirements for NOx and/or CO CEMS if a facility is utilizing 40 CFR 75 methodologies to gather and analyze data in lieu of 310 CMR 7.19(13)(b)1. through (b)12.

Response: MassDEP confirms that there are no performance monitoring availability (PMA) requirements for NOx and/or CO CEMS if a facility is using 40 CFR 75 methodologies to gather and analyze data in lieu of 310 CMR 7.19(13)(b)1. through (b)14. The monitoring data availability requirements for facilities using 40 CFR 75 methodologies are stated in 310 CMR 7.19(13)(b)12.

81. Comment: (DSG) Please confirm within 310 CMR 7.19(13)(b) that the use of the 40 CFR 75 diluent cap is allowed for CO if a facility chooses to utilize 40 CFR 75 procedures to "gather and analyze data."

Response: MassDEP confirms that when 40 CFR 75 procedures are used, the applicable diluent cap is allowed for CO.

82. Comment: (DSG) Within 310 CMR 7.19(13)(b)9. we propose allowing a facility to calculate a valid hour in accordance with the 40 CFR 60 "quadrant rule." For example, 310 CMR 7.19(13)(b)9. could be updated to incorporate the following bolded language:

> …a block hourly average from at least three data points, generated by a CEMS at 15 minute intervals over each on-hour period **or in accordance with 60.13(h)(2)**

Response: MassDEP agrees and has added the suggested change in the final regulations.

83. Comment: (DSG) Within 310 CMR 7.19(13)(b)9., an operating day is defined as a calendar day containing at least 4 operating hours. Please clarify whether the definition of an operating day was intended only for the purposes of calculating a calendar month average, or whether compliance with the applicable emission limits for facilities subject to the daily emission averages should also only be evaluated for "operating days." For example, the calendar day description could be updated by incorporating the following bolded language:

> …calculate a calendar day average **for each operating day** from a block hourly average…

Response: MassDEP has added the suggested change in the final regulations. An operating day consists of a minimum of 4 hours and is intended for calculating and determining compliance for a calendar day average for each operating day as defined.

84. Comment: (DSG) Regardless of the intent for evaluating emissions compliance based on daily averages, we would propose that paragraph 7.19(13)(b)10. be updated to state the 75% valid data per day requirement applies only to operating days as defined in 7.19(13)(b)9. For example, 7.19(13)(b)10. could be updated by incorporating the bolded language below:

> …in all cases obtain valid data for at least 75% of the hours per **operating** day…

Response: MassDEP agrees and has made the suggested change in the final regulations.

85. Comment: (DSG) 310 CMR 7.19(13)(b)9. can be difficult to read and understand as written. We propose updating the paragraph into separate sentences for each valid period definition. For example, the first sentence of the paragraph could be broken into three separate sentences each beginning with "Calculate a…" in order to describe how to calculate a calendar month average, a day average and an hourly average.

Response: MassDEP agrees and has broken the sentence into smaller parts and added an additional sentence to make it easier to read, as well as updated cross-references to the new sentences.

86. Comment: (DSG) Within the proposed updates to 310 CMR 7.19(4)(b), language was added to state that the "oil or oil and gas" emission limits apply even when oil and gas are combusted at different times. Please clarify that a large boiler permitted to burn any oil is subject to the "oil or oil and gas" emission limits in lieu of the gas only emission limits. Below are four specific examples of large boilers for which it would be helpful to clarify the applicable emission limit.

> Example 1: Permitted to burn both gas and oil, but no oil infrastructure is currently in place.
> Example 2: Permitted to burn both gas and oil, all required infrastructure is in place, but have not combusted oil in over a year due to financial or other non-regulatory reasons. The facility may choose to begin combusting oil any time in the future.
> Example 3: Permitted to burn gas as a primary fuel and oil as a secondary/backup fuel with a 12-month rolling limit on the hours and/or quantity burned (e.g. volume, mass or heat input).
> Example 4: Permitted to burn gas as a primary fuel and oil only for testing, maintenance or when gas is unavailable.

Response: A large boiler permitted to burn any oil is subject to the oil or oil and gas emission limits in lieu of the gas only emission limits even if the boiler is not burning oil (i.e., oil or oil and gas emission limits would apply in all four examples in the comment).

87. Comment: (DSG) 310 CMR 7.19(13)(d)4. has been updated to require a facility demonstrating compliance with NOx RACT using an annual capacity factor to submit documentation "in the first quarter of each year." But the paragraph also states that the information "may be included in the RACT quarterly report." These statements can be confusing as written as one may interrupt the referenced RACT quarter report to mean the first quarter RACT report due April 30th. We propose updating 310 CMR 7.19(13)(d)4. by incorporating the following bolded language:

…shall be provided to the Department in the first quarter of each **year (i.e. no later than March 31)**, and may be included in the **fourth quarter** RACT quarterly report **(due January 30)** if…

Response: MassDEP agrees and has made the suggested changes in the final regulations.

88. Comment: (DSG) 310 CMR 7.19(3)(a)3. states that any person using ERCs to demonstrate compliance with NOx RACT shall submit an Emissions Control Plan. Please clarify whether a facility that is currently using ERCs to demonstrate compliance with NOx RACT and plans to continue to utilize ERCs (i.e., no change to the compliance demonstrated) must submit an updated Emissions Control Plan. In addition, please specify the timeline (e.g. 180 days of promulgation date) to submit an Emissions Control Plan in accordance with paragraph (a)3.

Response: As stated in the Response to Comment 69, MassDEP revised 310 CMR 7.19(3)(a)1. to clarify that a facility owner or operator using, and planning to continue using, ERCs for RACT compliance must submit a new Emission Control Plan to MassDEP within 180 days of the promulgation date of the final regulations to account for the new NOx RACT emissions limits. In such cases, pursuant to the revised 310 CMR 7.19(2)(g), MassDEP will require review of the original basis for the creation of the banked ERCs (see Response to Comment 69). If the ERCs were generated due to reductions by a large boiler, combustion turbine, or internal combustion engine for which the standards have become more stringent, MassDEP will require recalculation of their value based on the new standards.

89. Comment: (DSG) The use of "rated capacity" within the 310 CMR 7.19 definition for Annual Capacity Factor is unclear as written for combustion turbines since the rated capacity is often temperature dependent. We propose adding clarifying language for combustion turbines stating "rated capacity **at ISO conditions**" or updating the definition to read "rated capacity **or maximum firing rate**."

Response: MassDEP agrees and has added a reference to International Organization for Standardization ("ISO") conditions in the final regulations.

90. Comment: (Eversource) MassDEP is proposing to amend 310 CMR 7.19: Reasonably Available Control Technology (RACT) for Sources of Nitrogen Oxides (NOx), to lower emission limits for stationary reciprocating internal combustion engines. These units are operated for electric grid reliability in difficult to serve areas. As such, the ability to retrofit the units to meet a strict NOx emission rate will be expensive, lengthy and, based on available footprint, may not be practical. We respectfully request the compliance time frame be extended from two years to five years.

Response: MassDEP believes two years is sufficient lead time for compliance with the NO_x RACT emission limits. MassDEP notes that a facility owner or operator can apply for alternative RACT if retrofitting controls is determined to be too costly or technically infeasible.

91. Comment: (TMLP) 310 CMR 7.19(1)(c)l0. Exemption for Units with an annual Capacity Factor Less than 10% (Low Utilization Units). TMLP strongly supports this provision, as any potential NOx emission reductions from Low Utilization units is small, and the cost to benefit ratio for NOx retrofits on these units would be very high. It is suggested, however, that this exemption be extended to medium and small size boilers subject to RACT (under 310 CMR 7.19(5) and (6)).

Response: MassDEP did not propose new NOx emission limits for medium and small size boilers and, therefore, cannot extent the low utilization exemption to these boilers in the final regulations.

92. Comment: (NRG) In contemplating any revisions to 310 CMR 7.19 the MassDEP should take into account the significant improvements in air quality over the period of time that 310 CMR 7.19 has been in effect. Massachusetts is in attainment for all the NAAQS. The MassDEP also needs to take into consideration that the sources affected by 310 CMR 7.19 operate in a very

different Independent System Operator of New England ("ISO-NE") market construct, than existed during the initial promulgation of the existing 310 CMR 7.19 regulations. The MassDEP regulatory efforts should be directed toward expediting the permitting for the installation of new sources. The implementation of any revisions to the regulations should take into account and follow the ISO-NE capacity market obligation calendar.

310 CMR 7.19(1)(c)10.: Exemption for Units with an annual Capacity Factor Less than 10% (Low Utilization Units).

- NRG supports 310 CMR 7.19(1)(c)10 but would like to look at expanding the Capacity Factor calculation from a three to five year average to properly take in to account a short term system-side catastrophic event that requires the operation of units for an extended period of time in any one year.

Response: Under the Clean Air Act, Massachusetts is subject to RACT based on its location in the Northeast Ozone Transport Region, not its attainment status. MassDEP believes two years is sufficient lead time for compliance with the NOx RACT emission limits and does not believe this timeframe is inherently inconsistent with the ISO-NE market. MassDEP notes that a facility owner or operator can apply for alternative RACT if retrofitting controls is determined to be too costly or infeasible.

MassDEP believes a three-year average is appropriate for the annual capacity factor calculation and provides a longer averaging period than similar "limited use" determinations found in EPA's Boiler Maximum Achievable Control Technology (MACT), 40 CFR Part 63 Subpart DDDDD (which uses an annual period) and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR Part 63 Subpart UUUUU (which uses a 24 months period).

93. Comment: (NRG) 310 CMR 7.19(2)(b) and 7.19(3)(a) – 60 Day Timeline for Submittal of Alternative RACT Requests and Modified RACT ECPs

- The requirement to submit a modified Emission Control Plan (ECP) or Alternative RACT request within 60 days of the promulgation of the revised RACT regulations is much too short. For an emission unit that is not able to readily achieve a proposed revised NOx standard for Large Boilers or Combustion Turbines, it would be necessary to undertake a major engineering and commercial review to conduct a technical and economic study and an associated cost/benefit analysis to properly identify and evaluate control alternatives; 60 days is not adequate to perform these tasks and prepare the associated RACT submittal, whereas one year is a more appropriate time frame for submitting an Alternative RACT or updated ECP.

Response: MassDEP notes that the draft regulations proposed a six-month timeframe for submitting an ECP or Alternative RACT request (not 60 days). MassDEP believes six months after the promulgation of the final regulations is sufficient and kept that timeframe in the final regulations.

310 CMR 7.19(4)(b) Revised RACT Limits for Large Boilers:

94. Comment: (NRG) The proposed NOx RACT limits would require the enhancement of the current combustion controls and may require the addition of non-RACT post–combustion controls. 310 CMR 7.19(4)(b) should specify that a source only need to consider combustion controls in assessing options to meet this limit, post-combustion controls would not be considered as RACT.

Response: MassDEP believes a facility owner or operator should review all control options listed in 310 CMR 7.19(2)(b) (including combustion controls and post-combustion controls) in determining RACT. If post-combustion controls are not technically or economically feasible, they may request an alternative RACT emissions limit.

95. Comment: (NRG) Under the Alternative RACT provisions:

a. The rule should explicitly indicate that the Alternative RACT evaluation is limited to consideration of combustion controls; and that consideration of After Treatment options shall not be required; and
b. The RACT cost/effectiveness calculations need to be explicitly based on actual historical operational usage and emissions of the Unit, rather than the potential-to-emit emissions.

Response: MassDEP believes it is reasonable for a facility owner or operator to consider all control options to meet RACT emissions limits, including combustion controls and post-combustion controls. If post-combustion controls are not technically or economically reasonable, they may request an alternative RACT emissions limit. Determining RACT cost effectiveness (dollars per ton emitted) is based on potential emissions, rather than actual emissions that fluctuate year to year and could increase in the future. If actual emissions are well below potential emissions, the owner or operator can consider obtaining a federally enforceable limit on operations, which would change cost effectiveness so that it reflects costs closer to actual emissions.

96. Comment: (NRG) Under 310 CMR 7.19(4)(b) – The language "The averaging time for determining compliance with 310 CMR 7.19(4)(a) shall be one hour…" needs to be changed to "The averaging time for determining compliance with 310 CMR 7.19(4)(b) shall be one hour…"

Response: The language in the proposed regulation was "The averaging time for determining compliance with 310 CMR 7.19(4)(b) shall be one hour…", which is correct. The commenter may have inadvertently commented on 310 CMR 7.19(4)(a) instead of 310 CMR 7.19(4)(b).

97. Comment: (NRG) Under 310 CMR 7.19(4)(b) – The language needs to be clarified for units subject to and in compliance with 310 CMR 7.29, the averaging period should be expanded to include a calendar month or 12 month rolling periods.

Response: The maximum averaging period allowed under EPA's RACT requirements is 30 days, and therefore the RACT averaging period for facilities complying with 310 CMR 7.29 cannot exceed a calendar month.

310 CMR 7.19(8) Stationary Reciprocating Internal Combustion Engines

98. Comment: (NRG) There needs to be an exemption that would exclude operational hours and periods due to unforeseen emergency situations outside of the control of the owner or operator of the unit.

Response: MassDEP does not believe this exemption is warranted. RICE subject to NOx RACT must meet the applicable emission standards in all operating scenarios unless historical operating hours are less than 1,000 per consecutive 12 month period.

99. Comment: (NRG) The implementation of controls will need to occur over a longer period of time, in the five plus year time frame, to be more closely aligned with the ISO-NE Forward Capacity Market obligations. If a unit exceeds the 1,000 hours in a 12 month rolling period, it would need to comply with the 310 CMR 7.19(8) limits at the beginning of the Forward Capacity Market obligation period four years from the month in which the unit exceeded the 1,000 hours.

Response: MassDEP believes two years is sufficient lead time for compliance with the NOx RACT emission limits in 310 CMR 7.19(8)(d). MassDEP has clarified that if an engine exceeds the 1,000 hours and becomes subject to RACT it would need to comply within two years of the year in which the 1,000 hours is exceeded.

Other Changes:

1. MassDEP changed the citation 310 CMR 7.19(1)(c)12 to 310 CMR 7.19(1)(d) to clarify that a large boiler or combustion turbine that has an annual capacity factor of less than 10% is still subject to the overall 310 CMR 7.19 regulation but is not subject to the revised NOx RACT emission limits provided their annual capacity factor remains less than 10%. In addition, MassDEP moved a provision proposed in 310 CMR 7.19(3)(a)1. to 310 CMR 7.19(1)(d) regarding compliance deadlines for a large boiler or combustion turbine that initially operated below the 10% capacity factor but then operates in a manner that meets or exceeds the 10% capacity factor (averaged over a three-year consecutive period) and becomes subject to the applicable emissions limits. In this case, the owner or operator of the boiler or combustion turbine must notify MassDEP within 180 days of no longer meeting the low capacity exemption, and, if applicable, submit an Emission Control Plan, and comply with the new presumptive NOx RACT levels within two years of no longer meeting the exemption. A similar compliance deadline provision for internal combustion engines already is contained in 310 CMR 7.19(8)(d).
2. MassDEP added a clarification in 310 CMR 7.19(8)(b) that an emergency engine installed in compliance with 310 CMR 7.03(10) or 310 CMR 7.26(42), as well as 310 CMR 7.02(8)i, is not subject to the requirements of 310 CMR 7.19(8).
3. MassDEP added a clarification in 310 CMR 7.19(8)(c) that this section (i.e., previous RACT emissions limits) does not apply if an internal combustion engine has exceeded 1,000 hours of operation during any consecutive period after the promulgation date of the regulations.

4. MassDEP decided not to make proposed revisions to 310 CMR 7.19(4)(c) that would have given an owner or operator of a large boiler the option of using the provision in 310 CMR 7.19(4)(c)1. when proposing an alternative RACT emissions limit, which allows an emissions limit "equal to 0.6 times the worst NOx emission rate." This provision has not been used in the past, and MassDEP believes alternative RACT should be case-by-case based on technological and economic feasibility.
5. MassDEP deleted language in 310 CMR 7.19(13)(a)1. and 2. regarding past deadlines for boiler repowering.

ENGINES AND TURBINES – 310 CMR 7.02, 7.03(10), 7.26(40)-(45)

100. Comment: (EPA) EPA understands you are aligning your requirements for engines with the federal regulations for stationary engines. We noted that provisions in sections 310 CMR 7.02(8)(i)(2) and 7.03(10)(a)(4) allow emergency engines to operate when capacity deficiencies result in a deviation of voltage from the electrical supplier to the premises of 3% above or 5% below standard voltage; or periods during which the regional transmission organization directs the implementation of voltage reductions, voluntary load curtailments by customers, or automatic or manual load shedding within Massachusetts in response to unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage levels. In addition, provisions in section 310 CMR 7.26(42)(d) allow emergency engines to operate for emergency demand response and the definition of emergency allows operation during voltage deviations. Please be aware, on May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit vacated the provisions in the Reciprocating Internal Combustion Engine (RICE) NESHAP National Emissions Standards for Hazardous Air Pollutants and NSPS (New Source Performance Standards) which allow emergency engines to operate for up to 100 hours for emergency demand response when the Reliability Coordinator has declared an Energy Emergency Alert Level 2 or for voltage or frequency deviations of 5 percent or greater below standard voltage or frequency. Specifically, the provisions in 40 CFR 63.6640(t)(2)(ii)-(iii), 60.4211 (f)(2)(ii)-(iii), and 60.4243(d)(2)(ii)-(iii) were vacated. Emergency engines subject to sections 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), or 7.26(42)(d) must also comply with the RICE NESHAP and/or NSPS requirements if applicable. Consequently, emergency engines operating for voltage or frequency deviations or in emergency demand response under sections 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), or 7.26(42)(d) may be required to meet the non-emergency engine requirements of the NESHAP and NSPS regulations.

Response: MassDEP has added the following language to 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), and 7.26(42)(d): "Additional limitations and conditions may apply, including but not limited to 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart JJJJ; and 40 CFR Part 60, Subpart IIII." The added language alerts owners of engines that EPA's regulations contain additional limitations and conditions that may apply to the operation of engines.

101. Comment: (EPA) Section 310 CMR 7.26(42)(b)(2) requires subject engines to comply with applicable model year emission limits in Part 60 Subpart IIII for compression ignition engines. Section 310 CMR 7.26(42)(b)(3) requires a certificate of conformity but allows spark ignition engines to provide a letter or other documentation from the supplier that the engine meets the applicable emission limit. The NSPS emission limits for spark ignition engines are contained in Part 60 Subpart JJJJ, but section 310 CMR 7.26(42)(b)(2) does not require emission limits in Part 60 Subpart JJJJ. Section 310 CMR 7.26(42)(b)(2) should require spark ignition engines to meet the NSPS Subpart JJJJ emission limits. In addition, MassDEP should allow emergency spark ignition engines to either conduct a performance test to demonstrate compliance with the emission limits or to obtain an EPA certificate of conformity under a manufacturer voluntary certification program as allowed by NSPS Subpart JJJJ.

Response: Under 310 CMR 7.26(42), the owner/operator must certify that the engine meets the applicable model year emission limitations set by EPA for nonroad compression ignition engines

contained in 40 CFR part 89. The part 89 emissions standards were incorporated by reference into the stationary compression ignition NSPS, 40 CFR part 60 subpart IIII, and are more stringent than the federal emission limits for at least some emergency spark-ignition engines in part 60 subpart JJJJ. Owners/operators of such spark ignition engines installed in Massachusetts have arranged for the suppliers to equip such engines with catalytic control devices that reduce emissions sufficiently to meet the more stringent 40 CFR 89 compression ignition standards, and received a letter or other documentation from the supplier attesting to this, as required by the MassDEP's regulations. Many spark ignition emergency engines have been certified in this way. Where compliance with subpart JJJJ results in emissions performance equal to or better than part 89, then the owner or operator of a stationary spark ignition engine will be able to certify under 310 CMR 7.26(42) without add-on controls.

102. Comment: (EH&E) It is our understanding that one intent of the proposed changes is to provide a path for emergency engines as well as non-emergency engines which are not able to become certified through the ERP process to be able to permit through the 310 CMR 7.02(5)(c) permitting process. We suggest that clarification be added to emphasize that this pathway applies to emergency engines as well, even if it requires them to be willing to become permitted as non-emergency engines.

Response: MassDEP has clarified in 310 CMR 7.02(5)(a)3.c. that the owner/operator of an engine may choose to apply for a plan approval under 310 CMR 7.02(5)(c) instead of complying with the emergency or non-emergency engine requirements in 310 CMR 7.26(42) and 7.26(43), respectively.

103. Comment: (AIM, EH&E, Epsilon, Epsilon and co-signers, NAIOP, Raytheon) MassDEP should better align its emergency engine regulations with EPA's National Emissions Standards for Hazardous Air Pollutants (NESHAP). The NESHAP allows use of an emergency generator for non-emergency purposes for up to 50 hours per year. We urge MassDEP to modify the emergency RICE provisions of 310 CMR 7.02, 310 CMR 7.03, and 310 CMR 7.26, to include a 50-hour allowance per year for general non-emergency operation (a subset of the standard 100-hour per year allowance for manufacturers' recommended maintenance and testing), consistent with federal emergency RICE regulations (40 CFR 63, Subpart ZZZZ; 40 CFR 60, Subpart IIII; and 40 CFR 60, Subpart JJJJ).

This would address a very serious issue for many companies that need such backup power for critical maintenance activities in order to keep equipment working safely. Often these facilities are required to rent generators to create power during planned shutdown of electrical infrastructure components – sometimes the same generators the facility has onsite – despite the fact that renting these generators is not only costly, but also increases air emissions and creates unnecessary safety risks. While a Plan Approval can be filed in Massachusetts for use of emergency generators in non-emergency situations, a Plan Approval, specifically to allow limited run time during planned electrical maintenance activities on infrastructure equipment, is not warranted and is overly cumbersome for an activity that is currently allowed under the NESHAP. The recommended change will result in the following benefits:

- *Protection of public safety*. Facility managers have a public obligation to maintain critical safety systems in good working order (supporting fire pumps, medical patient care systems, elevators, smoke control, airport lighting, etc.), and the revisions proposed herein will provide the flexibility to maintain these systems in accordance with applicable safety codes and industry standards.
- *Protection of air quality*. The current restrictions on emergency RICEs require facilities to utilize less stringently regulated portable/rental generators to perform short-term projects. In contrast, EPA's air quality rulemaking was specifically crafted to avoid such an outcome.
- *Alignment with federal air quality regulations and existing safety standards*. EPA's RICE air quality standards, as well as the safety codes applicable to each class of emergency system, have been implemented in their current form after rigorous evaluation from stakeholders over a number of years. A similar allowance at the State level would represent best industry practices while also streamlining the compliance strategy and administrative requirements.

This allowance would provide reasonable assurance that public safety obligations can be met, resolve the current "patchwork" where different emergency RICE guidance is provided by MassDEP and EPA Region 1, simplify the compliance strategy and the associated administrative/recordkeeping activities for each emergency RICE, and would be consistent with the Commonwealth's overall regulatory streamlining initiative (re: Executive Order 562).

In addition, MassDEP's definition of "normal maintenance and testing procedures as recommended by the manufacturer" is inconsistent with EPA's emergency RICE regulations that allow emergency RICEs to be "operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine." Under MassDEP's language, it is not clear that emergency RICE could be operated to meet safety code compliance obligations meets. We recommend that MassDEP adopt EPA's language.

The following language is proposed for addition within the amended emergency RICE provisions of 310 CMR 7.00:

Replacement language for 310 CMR 7.02(8)(i)(2) and 310 CMR 7.03(10)(a)(4)

> *The engine shall operate only during:*
>
> > *(i) Emergency situations, as defined within 310 CMR 7.26(41);*
> > *(ii) Up to 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine;*
> > *(iii) Up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of*

the 100 hours per calendar year for maintenance and testing provided in paragraph (ii).

Replacement language for 310 CMR 7.26(42)(d)(1)

The engine shall operate only during:

(i) Emergency situations;

(ii) Up to 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine;

(iii) Up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (ii).

A non-turn-back hour counter shall be installed, operated and maintained in good working order on each unit.

Response: MassDEP agrees and has added language to 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), and 7.26(42)(d) similar to that used in EPA's RICE NESHAP regarding 100 hours per year for maintenance checks and readiness testing (or as otherwise approved by EPA) and also has added a provisions that allow emergency engines to operate for up to 50 hours per year for non-emergency situations, consistent with EPA's RICE NESHAP.

104. Comment: (DSG) MassDEP has proposed to include "readiness testing" as an allowable operating reason, which we agree is an important clarification for facilities to remain in compliance with other applicable regulations (e.g. the fire code). However, the addition of the readiness testing language may not be enough to allow some facilities to continue to operate critical equipment (in accordance with other applicable regulations) when a building loses power during planned maintenance. We propose that the following bolded language be added to 310 CMR 7.02(8)(i)2.a.

The normal maintenance and testing procedure as recommended by the **engine** manufacturer, **normal maintenance and testing procedures of any system(s) supporting or supported by the engine,** or readiness testing;

In addition to the readiness testing language, we propose that following bolded language from the definition of "Emergency Stationary RICE" in 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII be incorporated into 310 CMR 7.02(8)(i)2.b.

periods of electrical power outage due to failure of the grid, in whole or in part, onsite disaster, local equipment failure, flood, fire or natural disaster, **or to produce power for critical networks or equipment (including power supplied to portions of a facility)**

when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted;

Response: For planned maintenance, MassDEP has added to 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), and 7.26(42)(d) a provision that allows emergency engines to operate for up to 50 hours per year for non-emergency situations, consistent with EPA's RICE NESHAP. MassDEP has changed "grid" to "electrical supply" in 310 CMR 7.02(8)(i)(2), 7.03(10)(a)(4), and 7.26(42)(d) to account for both electrical supply from the grid and from self-generation by a facility.

105. Comment: (DSG, EH&E, Epsilon, ESS, Irwin) Please clarify that the removal of the 300 operating hour/year restriction is effective upon promulgation of the final version of these proposed updates, even if an existing Plan Approval or Operating Permit includes such restrictions, so long as the operating hour restriction within the Plan Approval or Operating Permit cites the applicable sections of 310 CMR 7.00 and not another source (e.g. an operating hour restriction proposed within a Plan Approval application in order to remain under an emission threshold).

Many facilities with existing emergency generators currently hold plan approvals limiting the operating hours for those emergency engines to 300 hours per year. Please clarify whether MassDEP would require applications from those facilities to increase the allowed number of operating hours for existing emergency generators.

Consideration should be given as to whether this will increase potential emissions for facilities and to creating easy pathways for facilities to avoid falling into unnecessary high permit categories. The 25%/50% caps could be a good mechanism for many facilities. Outreach should be made to affected facilities and enough time allowed for facilities to change their status so they will not be inadvertently brought into inappropriate permit categories such as the Operating Permit program. Consideration should be given as to how this elimination of a federally enforceable limit will impact different types of facilities.

We recommend that you also clarify the default assumption in the absence of an absolute limit, such as the current 300 hours per year, for estimating potential to emit from emergency generators. An alternative default is 500 hours per year of operation per this EPA guidance: https://www.epa.gov/sites/production/files/2015-08/documents/emgen.pdf

Response: The removal of the 300 hour operating restriction for emergency engines is effective upon promulgation of the final amendments. Owners of emergency engines that have plan approvals that limit operation to 300 hours per year may apply to MassDEP for an administrative amendment of the plan approval to remove the 300 hours limit. In the interim, if an actual emergency situation required the owner to operate the engine for more than 300 hours MassDEP will exercise enforcement discretion on a case-by-case basis. Owners can also choose to keep the 300 hour restriction in their permit if they so desire.

A September 6, 1995 EPA memo states that "The EPA believes that 500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be

expected to operate under worst-case conditions. Alternative estimates can be made on a case-by-case basis where justified by the source owner or permitting authority (for example, if historical data on local power outages indicate that a larger or smaller number would be appropriate)." MassDEP agrees with EPA's guidance for calculating the potential to emit for an emergency engine (i.e., assume 500 hours of engine operation unless there are site-specific reasons that warrant a different estimate). If owners want a further restriction in engine operating hours, they can file a 25% or 50% registration with MassDEP to limit potential emissions.

106. Comment: (Irwin) For facilities that install new emergency generators larger than one megawatt and conduct an air modeling evaluation pursuant to 310 CMR 7.26(42(d)4.c., please clarify what MassDEP's policy would be for calculating average emissions rates in the absence of a specific limit on the number of operating hours.

Response: MassDEP would expect average emission rates to be calculated based on operating the engine for 500 hours in the absence of a specific limit on the number of operating hours. (See Response to Comment 105).

107. Comment: (Epsilon) 7.26 (40)-(45) Stack Height and Emission Dispersion. This has historically been an area of uncertainty and inconsistency in design and installation of engine stacks and DEP inspectors' review of these stack installations. It appears that DEP has been seeking to protect all individuals including on-site workers from the engine exhaust regardless of whether this is an appropriate area for regulation. DEP regulations should provide a reasonable assurance that NAAQS will be maintained at any offsite receptors and should not regulate worker protection which more appropriately falls with the purview of OSHA for example. Emergency generators by definition operate rarely and individuals are more likely to be exposed to diesel exhaust from passing vehicles than they are from diesel engines on emergency generators. Furthermore, EPA regulations on new engines are increasingly stringent so emergency generator emissions should be less of a concern for new engines. With this in mind, we recommend that the word "restrict" be replaced with "impede" in the stack height parts of both the emergency and non-emergency engines (a narrowing of the exit diameter should be allowed, but a stack cap should not), that the two sections be consistent with respect to stack height (have identical requirements), that any sensitive receptors be defined as offsite (adjacent property with separate ownership for example). We believe that any generator should be given the option of defining stack height based on use of an EPA Guideline air quality model based on offsite impacts just as for any other source. It is reasonable to simplify this to allow default heights above the engine enclosure for outdoor units or above shorter buildings but currently there are variations on 5-10 feet above the lower or higher or various heights in the proposed amendments. These should be logical and consistent whether emergency or non-emergency engines given that non-emergency already have very stringent emission limit. It is not reasonable to require very tall stacks on emergency generators due to the fact that an inspector arbitrarily judges that they "cause a condition of air pollution."

Response: The intent of MassDEP's stack height and siting criteria is to use common sense measures to protect receptors from emissions (e.g., engine exhaust should not be directly under a building air intake or point toward a close by college dormitory window). These measures are

separate from any modeling exercise that would follow EPA guidelines and focus on off-site receptors. MassDEP has replaced the term “restrict” with “impede” as suggested by the commenter in the final regulations.

108. Comment: (TMLP) It is suggested that 310 CMR 7.26(42) explicitly specify that Black Start Diesel Engines be treated the same as emergency engines, consistent with the federal rule 40 CFR 63 Subpart ZZZZ (see Subpart ZZZZ Table 2c). At Cleary-Flood Generation Station, the Unit #9 combustion turbine is started-up using a Black Start Engine. This engine is used solely to startup a combustion turbine. Moreover, the Black Start Engine is the only means of starting up the combustion turbine (i.e., there is no alternative electrical startup mechanism), so it is used at every combustion turbine startup, not just when electricity is unavailable.

Each operating event for the Black Start Engine is approximately 20 minutes, and the Black Start Engine is used exclusively at initial lite-off of the combustion turbine. Annual usage is typically in the range of 35-50 hours. Moreover, the very short operating times of these engines at each startup event makes use of SCR type controls largely ineffective, as the engine basically shuts down before the SCR would reach its activation temperature.

The existing MassDEP rules do not explicitly address Black Start Engines which can cause difficulties in permitting new units and performing major maintenance on older units. Black Start Engines should be included as an applicable emission unit type under 310 CMR 7.26(42).

The following revisions to 310 CMR 7.26(42) are requested:

In the Title for this provision, add the words " and Black Start"
(42) Emergency **and Black Start** Engines and Emergency Turbines
Modify 7.26(42)(d). "Operational Requirements" to explicitly reference Black Start Engines. Suggested language is provided below:

1. Operation and Maintenance.
An engine or turbine shall operate only during normal maintenance and testing procedures as recommended by the manufacturer, readiness testing, during an emergency, or for emergency demand response**, or as a black start engine**. A non-resettable back hour counter shall be installed, operated and maintained in good working order on each unit.

Response: Black start engine installations are typically associated with major PSD/NSR projects and/or major facilities and therefore would be subject to case-by-case plan review. Final plan approvals issued would have conditions for when black start engines can operate. Any new black engine installation can either meet the 310 CMR 7.26(42) emergency engine requirements or the non-emergency requirement, or apply for a plan approval.

109. Comment: (TMLP) It is suggested either in the 310 CMR 7.00 Definitions or in the 310 CMR 7.26(41)Definitions, a definition of "Black Start Engine" be added, and that the Definition be the same as used in 40 CFR 63 Subpart ZZZZ - namely, *Black start engine* means an engine whose only purpose is to start up a combustion turbine.

It is suggested that the MassDEP Air Regulation provisions applicable to Emergency Engines, such as 310 CMR 7.26(42), also be applied to Black Start Diesel engines, in the same manner as is done in 40 CFR 63 Subpart ZZZZ.

Response: Since MassDEP has chosen not to include black start engines with emergency engines, no definition is needed. However, a black start engine may be considered an emergency engine if it meets the requirements of 310 CMR 7.26(42). (see Response to Comment 108)

110. Comment: (TMLP) 310 CMR 7.26(43)(b) - Compression Ignition Engine ERP NOx Emission Limit. The 310 CMR 7.26(43)(b) provision establishing an ERP NOx limit of 0.15 lb/MWh for diesel (compression ignition) engines is much too restrictive, and TMLP believes it is impossible to achieve at this time. It is more than an order of magnitude more stringent than the EPA Subpart IIII Tier 4 compression ignition engine standard, which is a state of the art standard. In recent discussions TMLP had with engine manufacturers, no manufacturer was able to provide an engine that could achieve this MassDEP ERP NOx Limit, or anything close it.

The current engine NOx ERP Limit for compression ignition engines is less than half of the NOx ERP standard for oil fired combustion turbines (= 0.34lb/MWh - see 310 CMR 7.26(43) Table 2), and about an order of magnitude more stringent than the ERP standard for oil fired boilers(= 0.15 lb/MMBtu, which is~ equivalent for 1.5 lb/MWh for a typical heat rate of 10,000 Btu/KWh).

TMLP believes that the Subpart IIII Tier 4 standard represents the most appropriate ERP NOx limit for compression ignition engines. Further, it is suggested that this NOx engine ERP be specified as installation of either: (a) a Subpart IIII Tier 4 Certified unit; or (b) an engine that achieves the Subpart IIII Tier 4 emission standards at applicable operating loads. Tier 4 engines incorporate state of the art emission controls for a compression ignition engine, including an SCR (typically 90% reduction) and often a CO catalyst as well.

Response: MassDEP did not propose to amend any of the ERP emissions limits, and therefore a change in emissions limits without prior proposal and public comment is beyond the scope of the current amendments. MassDEP established stringent limits for non-emergency engines to ensure that the simplified ERP certification pathway (with no upfront MassDEP plan review) does not adversely affect air quality. A NOx emission limit of 0.15 lbs/MWh is required, which some natural gas-fired engines have been able to meet. While a compression-ignition engine currently may not be able to meet this limit, an owner who wishes to install a non-emergency compression ignition engine can apply to MassDEP for a plan approval.

MassDEP's non-emergency ERP emissions limits were based on limits in "Model Regulations for the output of Specified Air Emissions from Smaller Scale Electric Generation Resources," developed by the Regulatory Assistance Project (RAP) in 2002 under contract with the National Renewable Energy Laboratory (NREL). The RAP Rule was developed with a working group that included several state utility and air pollution regulators, representatives of the distributed resources industry, environmental advocates, and federal officials. The emission standards were considered "stretch goals" intended to push technology improvements. The NOx emission limit

was set very low, but within the range of reasonable expectations for technology improvements at the time.

NOx OZONE SEASON BUDGET PROGRAM – 310 CMR 7.34

111. Comment: (EPA) We support the mechanism that you propose in section 310 CMR 7.34(8) to address any exceedance of the state-wide budget of l,799 tons of NOx per ozone season. If this budget is exceeded, MassDEP would notify the MassNOx facilities that exceeded their emissions budget and these facilities would be required to buy Cross State Air Pollution Rule (CSAPR) NOx Ozone-Season allowances (2017 vintage or later) and transfer these to MassDEP.

Response: MassDEP appreciates EPA's support.

112. Comment: (EPA) Pursuant to conversations with MassDEP staff, we understand that it is MassDEP's intention to maintain the MassNOx budget at the same level of 1,799 tons of NOx, even if some facilities retire in the future. Furthermore, it is our understanding that the tons of NOx allocated to these retired facilities will remain in the state-wide budget, but will not be allocated to other MassNOx facilities. This approach is not, however, discussed in the proposed rule or the Background Document. Therefore, we recommend that MassDEP clarify its approach to retired units.

Response: MassDEP agrees and has clarified in 310 CMR 7.34(7)(c)-(d) of the final regulations that the state-wide budget will not be affected by retirements and that the emissions budget of a retired unit will not be allocated to any other MassNOx facility. MassDEP also has amended the language of 310 CMR 7.34(4)(d) to clarify the reporting requirements for permanently retired units.

113. Comment: (EPA) MassDEP issued its proposed rule prior to EPA's September 7, 2016 issuance of the final CSAPR Update. Some changes were made from the CSAPR Update proposal to the final version of EPA's rule. MassDEP should ensure that the citations that appear in 310 CMR 7.34 are appropriate based on the final version of the CSAPR Update rule. For example, references to 40 CFR 97 subpart BBBBB in section 310 CMR 7.34(2) should be changed to reference subpart EEEEE.

Response: MassDEP agrees and has updated citations to match the CSAPR Update rule in the final regulations.

114. Comment: (DSG) Within 310 CMR 7.34(7)(b): Table A, the unit designations are inconsistent between Part 75 IDs and Permit IDs. For example, Mystic Station references the permit IDs of EU4 and EU10 instead of the Part 75 IDs of MJ-1 and 7, while MBTA South Boston Power references the Part 75 IDs of A and B instead of the permit IDs of EU01 and EU02. We suggest making the table consistent for ease of understanding.

Response: MassDEP recognizes that there is a difference between the federal and state identifications (IDs) for units. The IDs MassDEP has used in the regulation are consistent with the unit IDs contained in all MassDEP-issued permits. Therefore, to retain consistency with existing permits MassDEP has not changed the unit IDs in the final regulations.

APPEALS – 310 CMR 7.51

115. Comment: (EPA) Since it is a state requirement that a person must exhaust his or her administrative remedies before requesting judicial review of a permit in state court, limiting standing in the regulations may indirectly restrict a person's opportunity to request judicial review depending on exactly how the state requirement is drafted.

In addition, although not a required element for a SIP, a state's administrative procedures for appealing air permits can have unintended consequences for CAA permitting. Specifically, section 502(b)(6) of the CAA requires a state's title V operating permit program to provide:

> "Adequate, streamlined, and reasonable procedures for expeditiously determining when applications are complete, for processing such applications, for public notice, including offering an opportunity for public comment and a hearing, and for expeditious review of permit actions, including applications, renewals, or revisions, and including an opportunity for judicial review in State court of the final permit action by the applicant, any person who participated in the public comment process, and any other person who could obtain judicial review of that action under applicable law."

The EPA has interpreted this provision of Title V to require that a state's Title V operating permit program provide standing to appeal a Title V permit in state court consistent with Article III of the U.S. Constitution's standing requirements. The Fourth Circuit Court of Appeals upheld EPA's interpretation in Commonwealth of Virginia v. Browner, 80 F. 3d 869 (4th Cir. 1996). Since MassDEP's statutory authority under M.G.L. chapter 111, section 142B provides standing to appeal a Title V permit that is consistent with section 502(b)(6) of the Clean Air Act, and this provision is included in EPA's approval of MassDEP's State Plan to implement Title V of the Clean Air Act, EPA believes that MassDEP's final regulations must reflect this requirement.

Response: MassDEP agrees and amended the final regulation to require persons to comment on the proposed approval, including the Operating Permit, to make it consistent with section 502(b)(6) of the Clean Air Act and to assure that the air appeal regulation does not impede a person's standing to seek judicial review of an operating permit.

116. Comment: (NAIOP) Proposed 310 CMR 7.51 would establish rules for requesting an adjudicatory hearing on decisions by MassDEP on applications filed under 310 CMR 7.00. Subsection 7.51(1)(c) would exempt certain such decisions as listed in that subsection. NAIOP notes while only certain LPAs would require public notice under the new proposed 7.02(3)(h), all LPAs require applications under 310 CMR 7.00, and none are exempted under 7.51(1)(c). Accordingly, an adjudicatory hearing could be requested even for an LPA for which no public notice was issued and no comment period occurred. In those circumstances, the Department could be forced to participate in an adjudicatory hearing without having first provided an opportunity to receive and consider comments from the public.

NAIOP believes the better course would be for adjudicatory hearings to be available only for CPAs and those LPAs for which public notice is required under 310 CMR 7.02(3)(h). The

remaining LPAs are minor in potential impact and should be included within the exemptions under 7.51(1)(c).

Response: MassDEP did not make this change. LPAs have historically been subject to appeal and very few LPAs, if any, would trigger public comment under 310 CMR 7.02(3)(h). Very few LPAs are appealed, and MassDEP does not believe maintaining appeal rights for LPAs will pose an unnecessary burden. Moreover, there are other permit decisions issued pursuant to 310 CMR 7.00 that do not require a public comment that also are not exempt from the air appeal regulation.

117. Comment: (NAIOP) The proposed regulation require ten persons groups to submit comments during the public comment period in order to have a right to initiate the adjudicatory hearing, but aggrieved persons would not. NAIOP believes that the Department should also require aggrieved persons to submit comments in order to have a right to initiate an adjudicatory hearing. Due to the public notice provisions in proposed 7.02(3)(h), potential aggrieved persons will be on notice with time to provide comments. It is neither fair to applicants, nor wise for the Department, to have to address the concerns of aggrieved persons for the first time in an adjudicatory hearing. Doing so would increase the likelihood that their concerns are known, addressed and resolved during the writing of the permit. The Department has included such additional limitations elsewhere in its permitting regulations. See 310 CMR 9.17(1)(b) (a person may seek an adjudicatory hearing as an aggrieved person only if the person submitted comments), and 310 CMR 10.05(j) (aggrieved person may request adjudicatory hearing on a wetlands superseding order of conditions (SOC) only if the person participated at SOC stage). The Department can and should do the same under 310 CMR 7.00.

Response: MassDEP agrees and the final regulations require aggrieved persons to submit comments during the public comment period, if there is one, as a prerequisite for standing to request an adjudicatory hearing. This is also consistent with some of MassDEP's other programs and will satisfy EPA's request (see Response to Comment 111) to make the regulations consistent with 502(b) of the Clean Air Act.

118. Comment: (NAIOP) Proposed 7.51(1)(i) limits the issues to be adjudicated to the subject matter of the Department's decision. NAIOP believes that this provision merely states the obvious, and should go further. The issues to be adjudicated should be limited to issues that had been raised in the comments on the proposed decision. The Department has included such additional limitations elsewhere in its permitting regulations. See 310 CMR 16.05(c) (issues in an adjudicatory hearing on a recycling permit limited to issues raised in comments, unless it was not reasonably possible with due diligence, or for good cause shown). The Department can and should do the same under 310 CMR 7.00. Otherwise, even though there was a public comment period, persons or competitors could sit back and then initiate a time-consuming adjudicatory hearing over issues that should have been and could have been resolved earlier. Sound use of MassDEP resources, as well as fairness to applicants, compel such limitations on indiscriminate use of adjudicatory hearings.

Response: MassDEP agrees and has revised 310 CMR 7.51(1)(i) so that if a public comment period is held, the issues that may be raised in a request for an adjudicatory hearing are limited to matters raised during the public comment period, unless a matter could not reasonably have been

known at the time of the public comment period or for other good cause shown. This is consistent with other MassDEP programs and EPA's appeal regulations, which limit the issues to be adjudicated to those raised in the comments received.

119. Comment: (ESS) It is our opinion that this section [7.51(1)(c) regarding exemptions from appeals for certain types of MassDEP decisions] infringes upon the right of businesses to contest certain decisions made by the department in an adjudicatory setting, to allow for a neutral and independent authority to evaluate the basis for the decision. The appeals process would only permit a review by the MassDEP, the authority imposing the action, and would not allow for additional review from a neutral source, via the adjudicatory review process. Although there may not be a specific dollar amount associated with one of the above actions, there may be consequential operational or compliance costs to businesses that may result and cause irreparable harm requiring diversion of funds that would normally be used to support business growth initiatives.

Response: The regulations exempt certain types of activities under 310 CMR 7.00 from the right to request an adjudicatory hearing under 310 CMR 7.51(1) because those types of activities are not the type of activities where MassDEP has to issue a decision (e.g., notices or certifications) or they are discretionary waivers of regulatory requirements.

In addition, there are existing laws that specifically require certain MassDEP decisions to be appealed to the Courts or other jurisdictions. For example, under MassDEP's Certification of Tunnel Ventilation Systems in the Metropolitan Boston Air Pollution Control District regulation, 310 CMR 7.38, any appeal of MassDEP's decision to approve MassDOT's Tunnel Ventilation Renewal Certification must be filed in Massachusetts Superior Court. Moreover, federal law and the delegation agreement between EPA and MassDEP for the implementation of the federal Prevention of Significant Deterioration (PSD) program specifically require all appeals of permits be filed with EPA's Environmental Appeals Board. MassDEP does not have jurisdiction to handle these appeals.

The enforcement regulations at 310 CMR 7.51(3) specifically require persons to appeal an enforcement order within 10 days of the issuance of that action, while the air appeal regulations at 310 CMR 7.51(1) give persons 21 days to request an appeal of a permit decision. Therefore, appeals of enforcement orders are governed by 310 CMR 7.51(3), not 310 CMR 7.51(1). Similarly, appeals of administrative penalty assessments are governed by 310 CMR 5.00 and must be exempted from 310 CMR 7.51(1).

120. Comment: (Epsilon) With respect to the addition of a public comment period and the "clarification" of the adjudicatory appeals process, we concur with the comments made to you by e-mail from Thomas A. Mackie, Esq. on 9/20. We also generally agree with the comments made by NAIOP with respect to limitations suggested on the availability, rights to initiate, and the subject matter of hearings. We are concerned that amendments as proposed will open the door to frivolous or harassing appeals.

Response: See Responses to Comments 115 and 117 with respect to the limitations suggested on the availability, rights to initiate, and the subject matter of the hearings. MassDEP does not

believe that the amendments will open the door to frivolous or harassing appeals. MassDEP believes the air appeal regulations will have the opposite effect by providing certainty as to who has standing and the process for appealing air permit decisions. Prior to adopting the air appeal regulation, MassDEP received a number of appeals of air permit decisions that were on issues unrelated to the air permit (e.g., water and wetland issues), requested by persons who did not have standing, and/or were not filed within the 21 day appeal period. MassDEP believes that the air appeal regulation may cut down on the number of frivolous appeals because people will know that their appeal may be dismissed if it does not comply with the air appeal regulation.

121. Comment: (Thomas A. Mackie) I note that these rules are ostensibly being promulgated under E.O. 562, which was designed to streamline permitting, reduce unnecessary regulatory burden and dispose of requirements that are needlessly more stringent than federal requirements. The adjudicatory hearing provisions in these proposed rules are not consistent with that mandate. Provision of the opportunity to initiate an adjudicatory appeal/hearing by aggrieved persons and 10 citizen groups is NOT legally mandated by the Administrative Procedures Act or the Massachusetts Clean Air Act, with exception to the incorporation in the latter of appeal rights on certain federal permits. With minor exceptions not applicable here, under the General Laws and existing MassDEP regulations the only person entitled to request an adjudicatory hearing is the person whose "legal rights, duties or privileges" are determined under the permit (i.e. the permittee), and the rights of ten citizen groups and affected persons are limited to "intervention" in the adjudicatory hearing, if any, requested by that person. Thus, these are not mere "clarifications," but a wholesale re-write of long standing rules.

The Department should provide that air plan approvals remain valid during the pendency of an appeal unless the appellant requests, and the Presiding Officer grants, a stay in effectiveness of the approval. There is no legal mandate that the effectiveness of the permit be stayed pending appeal. There is precedent to the opposite in the DEP's RCC permit appeal rules at 310 CMR 16.50 and similarly in G.L. c. 40A governing appeal of zoning special permits. The applicant should be entitled to proceed at risk rather than giving appellants, who have a low bar, the opportunity to kill a project through delay.

The Department should make clear in a discussion document exactly what the federal law and regulations require in the form of public participation and opportunity for hearing on Department issued permits as opposed to permits that are NOT subject to such federally mandated public participation and/or adjudicatory review procedures. See, in particular, the reference in M.G.L. c. 111, § 142B to the federal Clean Air Act, section 502 (b) (6), 42 U.S.C. section 7661a (b) (6). You should be very clear about where you are including public notice provisions to conform the Massachusetts SIP to federal requirements for same and areas where the public participation and perhaps further review are being provided solely in the discretion of the MassDEP. You should also make clear when the Massachusetts Clean Air Act requires the Department to provide an opportunity for appeal and the standing requirements thereunder.

Finally, I anticipate, perhaps wrongly, that the "tailoring rule" CO2 thresholds being added to the rules (as confirmed today) may be tightened after public comment, particularly in light of the new Executive Order and the Kain decision. In combination with the liberalization on initiation

of adjudicatory hearings, this should give the Department (and the Administration) pause. What may sound like a great idea today, may turn around to haunt the Department in the future.

Response: The final air appeal regulation does not give intervenors standing to appeal. The regulations require aggrieved persons or 10 person groups to submit written comments during the public comment period as a prerequisite to gain standing to request an adjudicatory hearing at MassDEP.

Although the Administrative Procedures Act, M.G.L. c. 30A is silent on giving aggrieved persons and 10 person groups standing to request an adjudicatory hearing, the broad language in the statute give MassDEP the authority to adopt its own adjudicatory hearing regulations which may provide standing to parties other than the applicant. Specifically M.G.L. c. 30A, § 9 gives MassDEP broad authority to adopt adjudicatory proceeding regulations that include other requirements besides the procedures explicitly required. Therefore, MassDEP is relying on this broad authority to provide standing to aggrieved persons and 10 person groups that submit written comments during the public comment period, where a public comment period is provided.

Allowing persons who comment on the permit decision to have standing to appeal the decision is consistent with MassDEP's other program regulations. For example, the Waterways regulations at 310 CMR 9.17 allow aggrieved persons and ten persons groups to request an adjudicatory hearing, and the Recycling, Composting and Conversion permit regulations at 310 CMR 16.03 et seq. allow aggrieved persons, ten persons groups and municipalities to request an adjudicatory hearing.

In addition, M.G.L. c. 111, § 142B explicitly allows "any person who participates in any public participation process required by the federal Clean Air Act, section 502(b)(6)[1], 42 U.S.C. section 7661a (b)(6), …or any regulation enacted thereunder [operating permit regulation 310 CMR 7.00: Appendix C] with respect to the department's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to chapter thirty A, and may obtain judicial review, pursuant to chapter thirty A, of a final decision therein." EPA has interpreted this provision of Title V to require that a state's Title V operating permit program must provide all parties who comment on draft permits during a public comment period standing to request an agency hearing and to appeal a Title V permit in state court consistent with Article III of the U.S. Constitution's standing requirements. The Fourth Circuit Court of Appeals upheld EPA's interpretation in Commonwealth of Virginia v. Browner, 80 F. 3d 869 (4th Cir. 1996).

[1] **§ 502(b)** The administrator shall promulgate…regulations establishing the minimum elements of a permit program to be administrated by any pollution control agency. These elements shall include each of the following:

(6)…and including an opportunity for judicial review in State court of the final permit action by the applicant, any person who participated in the public comment process, and any other person who could obtain judicial review of that action under applicable law.

Since MassDEP's statutory authority under M.G.L. c. 111, §142B, provides standing to appeal a Title V permit that is consistent with section 502(b)(6) of the Clean Air Act, and this provision is included in EPA's approval of MassDEP's State Plan to implement Title V of the Clean Air Act, EPA provided comments that it believes that MassDEP's final regulations must reflect this requirement. While this provision requires MassDEP to provide standing to all parties who comment on Operating Permits within the public comment periods required under 310 CMR 7.00: Appendix C, MassDEP has committed to adopting regulations that establish clear, rational and orderly regulations for adjudicatory hearings regarding all air plan application decisions under the air regulations. *See also* In the Matter of Palmer Renewable Energy, LLC, Final Decision, Docket Nos. 2011-021 & 022 (September 11, 2012).

MassDEP also believes that these regulations are consistent with the streamlining efforts required by Executive Order 562 because the regulations are intended to clarify procedures for requesting an adjudicatory hearing for an air permit decision and streamline procedures for applicants as well as for other parties. In the absence of these regulations, there have been a number of appeals during which many hours have been spent litigating over the date on which the appeal period began, the process for delivery of notice of the permit decision and the standing of parties to request hearings. The clarity and specificity of the regulations will reduce the time that all parties need to spend in litigation of procedural issues. In addition, the requirement for all parties to comment prior to their right to request a hearing will ensure that their concerns are stated early in the process so that they may be addressed prior to issuing the final permit. This should minimize the number of issues that would remain to be adjudicated at an agency hearing.

As for the issue of when a MassDEP approval of a proposed air plan should be stayed, MassDEP is continuing its long-standing policy of staying construction of a project during the pendency of an adjudicatory hearing until a final decision is issued by the Commissioner. This policy is based on the language of the regulations in 310 CMR 7.02(1)(b), which prohibits construction prior to obtaining MassDEP's approval of an application. MassDEP follows EPA Guidance documents for federal PSD Permits regarding activities that are considered construction of the project and those activities that may proceed prior to the Commissioner's final decision, such as site clearing and other pre-construction activities. After issuance of the Commissioner's final decision, project construction is allowed to proceed.

MassDEP agrees that the regulations should be clear on when federal and state regulations require public comment on a permit before it is issued; however, 310 CMR 7.52 is not the appropriate location for this clarification. MassDEP is simultaneously promulgating amendments to 310 CMR 7.02 that require a public comment period on draft plan approvals for non-major comprehensive plan approvals prior to issuing a decision. The final regulations also define the federally required process for posting a notice of public comment and for having a public comment period. These amendments are proposed to conform to requirements of federal law. See the Responses to Comments 9 and 10.

At this time, MassDEP is not making the thresholds for GHGs more stringent than the proposed thresholds.